Fall 2018 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

RD2060	Overall LMA	Total LMA						
Reclamation District No. 2060 Hastings	Rating	Miles						
Recialitation district No. 2000 Hastings	M	15.65						
			nce Deficiency		Enforc	ement	Design 8	
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	Obsole M Miles	
Earthen Levee			1					
Vegetation	1.38		1.38	8.82%				
Encroachments					1.66			
Slope Stability	0.01		0.01	0.06%				
Repair Gates	0.01		0.01	0.06%				
Supplemental								
2017 USACE Erosion Survey, DRAFT	0.19		0.19	1.21%				
DWR UCIP Field Study					0.09			
2017 Storm Damage	1.00		1.00	6.39%				
LMA Totals:	2.59	0.00	2.59	16.55%	1.75	0.00	0.00	0.00
Unit No. 01 Lindsey Slough LB	Overall Unit	Total Unit						
Offit No. 01 Linusey Slough LB	Rating	Miles						
RD2060	A	6.97						
RD2060			D. C		- ·		Design 8	System
Rated Item	NA NATIO		nce Deficiency	Th h L. l. 0/		ement	Obsole	
5 // L	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee Vegetation	0.17		0.17	2.44%				
Repair Gates	0.17		0.17	0.14%				
Supplemental	0.01		0.01	0.1476				
2017 USACE Erosion Survey, DRAFT	0.13		0.13	1.87%				
DWR UCIP Field Study					0.03			
2017 Storm Damage	0.28		0.28	4.02%				
Unit Totals:	0.59	0.00	0.59	8.46%	0.03	0.00	0.00	0.00
O'mic Fotules		0.00	0.00	0070	0.00	0.00	0.00	0.00
Unit No. 02 Ulatis Creek RB	Overall Unit Rating	Total Unit Miles						
PD2060	U	3.64						
RD2060			nce Deficiency		Fofore	ement	Design 8	System
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles		Obsole: M Miles	U Miles
Earthen Levee								
Vegetation	1.21		1.21	33.23%				
Encroachments					1.66			
Supplemental		1	·					
DWR UCIP Field Study					0.03			
	1.21	0.00	1.21	33.23%	1.69	0.00	0.00	0.00

Fall 2018 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin (cont.)

Unit No. 03 Cache Slough RB	Overall Unit Rating	Total Unit Miles						
RD2060	M	5.03						
Rated Item		Maintena					sign & System	
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee							,	
Slope Stability	0.01		0.01	0.20%				
Supplemental								
2017 USACE Erosion Survey, DRAFT	0.06		0.06	1.19%				
DWR UCIP Field Study					0.03			
2017 Storm Damage	0.72		0.72	14.30%				
Unit Totals:	0.79	0.00	0.79	15.69%	0.03	0.00	0.00	0.00

LMA District Cover Sheet

Fall 2018 Levee Inspection Results

Reclamation District No. 2060 Hastings

	(March - May)	(June - August)	(September - November)	(December - February)						
† Overall LMA Rating (Fall Only)			M							
** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.										
	† SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.									
FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.										
Comments										

Unit Cover Sheet

Fall 2018 Levee Inspection Results

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles
Unit No. 01 Lindsey Slough	Left	6.97

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	3/28/2018 - 3/28/2018		10/25/2018 - 10/25/2018	
DWR Inspector	Keith Millard		David Julian	
Accompanied By	Mark Boyd RD 2060 Hastings Tract		Mark Boyd RD 2060 Hastings Tract	
	Michael Moncrief MBK Engineers		Michael Moncrief MBK Engineers	
	Jack Kuechler RD 2060		Jack Kuechler RD 2060	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start		Rating **	Α	Issue No.		4	
LM End		Issue Type +	Ма	Location *			
Category	Earthen Levee			GPS La	atitude	e/Longitude	
Calegory		Start		End			
Operations & Maintenance				٥		0	
пеш	Manuals			0			0
DWR ID DWR_RD2060_01_f _ 2014_4							
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
RD 2060 h	as the O&	M Manual on	file.				

No Photos

LM Start		Rating **	Α	Issue No.	7		
LM End		Issue Type +	Ma	Location *			
Category	Earthen Levee			GPS La	atitud	le/Longitude	
Calegory						End	
Item		y Supplies &			0		0
пеш	Equipmen	nt		0		0	
DWR ID	DWR_RD2	060_01_f _ 201	'				
		Comn	nent Cod	de			
							Τ
		Inspecto	or Comm	nent			
RD 2060 h	as emerge	ency supplies	on hand				

No Photos

LM Start		Rating **	Α	Issue No.		12	
LM End		Issue Type +	Ма	Location *			
Category	Earthen Levee			GPS La	atituc	le/Longitude	
Calegory				Start		End	
Item	Flood Pre	lood Preparedness & Training			0		0
item							0
DWR ID	D DWR_RD2060_01_s _ 2012_12						
		Comn	nent Cod	le			
		Inspecto	or Comm	ent			
RD 2060 h	as trained	staff for a floo	od fight.				

No Photos

** Rating
LS: Land Side N/A: Not Applicable
WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
M: Minimally Acceptable
U: Unacceptable
M: Not Inspected/Rated
C: Corrected
C: Corrected
AW: Acceptable but Monitor & Maintain
En: Enforcement

** Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start		Rating **	С	Issue No.		35	
LM End		Issue Type +	Ма	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item		ACE Erosion S	Survey,		0		0
пеш	DRAFT			0			0
DWR ID	DWR_RD2060_01_f _ 2018_35						
		Comn	nent Coo	de			

No Photos

Inspector Comment

2017 Site ID: LDS 1.9 L Status: Repaired 2017 Field Notes:

Site History: 2011 - Multiple erosion pockets. Deep cracks throughout site could lead to further bank failure. 2016 - Site has been repaired by locals.

LM Start		Rating **	С	Issue No.		36		
LM End		Issue Type +	Ma	Location *	WS			
Category	Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Item		CE Erosion S	Survey,		0		0	
пеш	DRAFT				0 0			
DWR ID	DWR_RD2060_01_f _ 2018_36							
	Comment Code							

No Photos

Inspector Comment

2017 Site ID: LDS 2.4 L Status: Repaired 2017 Field Notes:

Site History: 2011 - Two erosion pockets from rotational failures. Very

soft soil. 2016 - Repaired by locals.

LM Start	0.30	Rating **	С	Issue No.		57		
LM End	0.30	Issue Type +	Ma	Location *		WS		
Category	Earthen Levee				GPS Latitude/Longitude			
Category				Start		End		
Item	Encroach	ncroachments			23°	38.247623	0	
item				-121.7016	42 °	-121.701642	٥	
DWR ID	DWR_RD2	060_01_s _ 201	8_57					

Comment Code

TR: Tree or limb

Inspector Comment

Large tree trunk was hauled out of water in 2017. Should be removed from waterside berm.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	0.40	Rating **	М	Issue No.		5		
LM End	0.40	Issue Type +	Ma	Location *	WS			
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	2017 Storm Damage			38.2478	94°	38.247911 °		
item				-121.7034	92 °	-121.703539 °		
DWR ID DWR_RD2060_01_f _ 2017_5								
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 3/4 of the way down the slope, near the water line towards the waterside toe.

Site ID No:358

Site Designation:LMA-185 Repair Type: Erosion Rating:Area of Concern Field Date:7/12/2017

Notes: Small erosion into bank.

LM Start	0.40	Rating **	М	Issue No.	5 (cont)
LM End	0.40	Issue Type +	Ma	Location *	WS



Photo 2 of 6: FA_2018_RD2060_241_5_20180925_00002.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	0.40	Rating **	М	Issue No.		5 (cont)	
LM End	0.40	Issue Type +	Ма	Location *		WS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Category				Start		End	
Item	2017 Storm Damage			38.24789	94 °	38.247911°	
пеш				-121.70349	92 °	-121.703539°	
DWR ID	DWR_RD2060_01_f _ 2017_5						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 3/4 of the way down the slope, near the water line towards the waterside toe.

Site ID No:358

Site Designation:LMA-185 Repair Type: Erosion Rating: Area of Concern Field Date:7/12/2017

Notes: Small erosion into bank.

LM Start	0.40	Rating **	М	Issue No.	5 (cont)
LM End	0.40	Issue Type +	Ma	Location *	WS



Photo 4 of 6: FA_2018_RD2060_241_5_20180925_00004.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	0.40	Rating **	М	Issue No.		5 (cont)	
LM End	0.40	Issue Type +	Ма	Location *		WS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Category				Start		End	
Item	2017 Storm Damage			38.24789	94 °	38.247911°	
пеш				-121.70349	92 °	-121.703539°	
DWR ID	DWR_RD2060_01_f _ 2017_5						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 3/4 of the way down the slope, near the water line towards the waterside toe.

Site ID No:358

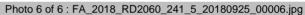
Site Designation:LMA-185 Repair Type: Erosion Rating:Area of Concern Field Date:7/12/2017

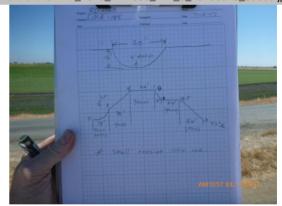
Notes: Small erosion into bank.

	-	Law		
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at all				
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			one to sel to	
网络 大学 50 g				Se Co

Photo 5 of 6: FA_2018_RD2060_241_5_20180925_00005.jpg

LM Start	0.40	Rating **	М	Issue No.	5 (cont)
LM End	0.40	Issue Type +	Ma	Location *	WS





N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	0.41	Rating **	М	Issue No.	. 8			
LM End	0.42	Issue Type +	Ма	Location *		WS		
Category	ental	GPS Latitude/Longitude						
Calegory	Category					End		
Item	2017 Stor	m Damage		38.24803	36°	38.248017°		
пеш				-121.70353	39°	-121.703789°		
DWR ID	DWR ID DWR_RD2060_01_f _ 2017_8							
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope extending in to existing rip rap. Existing rip rap appears to have been pulled off in this section.

Site ID No:359

Site Designation:LMA-186

Repair Type: Erosion Rating:Area of Concern

Field Date:7/12/2017

Notes: Site had riprap but is eroded away. Minor erosion in toe of levee.

LM Start	0.41	Rating **	М	Issue No.	8 (cont)
LM End	0.42	Issue Type +	Ma	Location *	WS

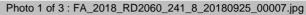




Photo 2 of 3: FA_2018_RD2060_241_8_20180925_00008.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	0.41	Rating **	М	8 (cont)			
LM End	0.42	Issue Type +	Ma	Location *	WS		
Category	ental	GPS Latitude/Longitude					
Calegory		Start		End			
Item	2017 Stor	m Damage		38.2480	38.248017°		
пеш				-121.7035	39°	-121.703789°	
DWR ID DWR_RD2060_01_f _ 2017_8							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Erosion commences approximately halfway down the water side slope extending in to existing rip rap. Existing rip rap appears to have been pulled off in this section.

Site ID No:359

Site Designation:LMA-186

Repair Type: Erosion Rating:Area of Concern Field Date:7/12/2017

Notes: Site had riprap but is eroded away. Minor erosion in toe of levee.



LM Start	0.75	Rating **	М	Issue No.	9			
LM End	0.76	Issue Type +	Ma	Location *		WS		
Category	ental	GPS Latitude/Longitude						
Category	egory					End		
Item	2017 Stor	m Damage		38.249314°		38.249400 °		
пеш				-121.7094	61 °	-121.709608°		
DWR ID DWR_RD2060_01_f _ 2017_9								
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope extending in to existing rip rap. Erosion is concentrated near the waterline. Existing rip rap appears to have been pulled off in this section.

Site ID No:360

Site Designation:LMA-187 Repair Type: Erosion Rating:Area of Concern Field Date:7/12/2017

Notes: Erosion looks old but has progressed this year.



LS : Land Side N/A : Not Applicable WS : Water Side

* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	0.75	Issue No.		9 (cont)				
LM End	0.76	Issue Type +	Ма	Location *	WS			
Supplemental				GPS Latitude/Longitude				
Category				Start		End		
Item	2017 Stor	m Damage		38.24931	4 °	38.249400 °		
пеш				-121.70946	61 °	-121.709608 °		
DWR ID DWR_RD2060_01_f _ 2017_9								
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope extending in to existing rip rap. Erosion is concentrated near the waterline. Existing rip rap appears to have been pulled off in this section.

Site ID No:360

Site Designation:LMA-187 Repair Type: Erosion Rating:Area of Concern

Field Date:7/12/2017

Notes: Erosion looks old but has progressed this year.

LM Start	0.75	Rating **	М	Issue No.	9 (cont)
LM End	0.76	Issue Type +	Ma	Location *	WS

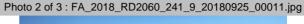




Photo 3 of 3: FA_2018_RD2060_241_9_20180925_00012.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	0.92	Rating **	М	Issue No.		10		
LM End	0.93	Issue Type +	Ма	Location *		WS		
Category				GPS Latitude/Longitude				
Calegory	liegory					End		
Item	2017 Stor	m Damage		38.2508	75 °	38.250953 °		
пеш				-121.7119	42 °	-121.712078°		
DWR ID DWR_RD2060_01_f _ 2018_10								
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description:Sloughing commences approximately halfway down the

water side slope. Site ID No:361

Site Designation:LMA-188 Repair Type: Erosion

Rating: Area of Concern Field Date:7/12/2017

Notes: Minor sloughing, mostly riprap has moved down the slope and

into channel.

LM Start	0.92	Rating **	М	Issue No.	10 (cont)
LM End	0.93	Issue Type +	Ma	Location *	WS

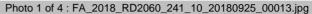




Photo 2 of 4: FA_2018_RD2060_241_10_20180925_00014.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	0.92	Issue No.	10 (cont)						
LM End	0.93	Issue Type +	Ма	Location *	WS				
Catagony	Category Supplemental				Supplemental GPS Latitude/Longit				le/Longitude
Calegory						End			
Item	2017 Stor	m Damage		38.2508	75 °	38.250953 °			
пеш				-121.7119	42 °	-121.712078°			
DWR ID	D DWR_RD2060_01_f _ 2018_10								
Comment Code									

Inspector Comment

Levee Evaluation Comments

Description:Sloughing commences approximately halfway down the

water side slope. Site ID No:361

Site Designation:LMA-188

Repair Type: Erosion Rating: Area of Concern Field Date:7/12/2017

Notes: Minor sloughing, mostly riprap has moved down the slope and

into channel.



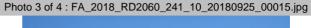




Photo 4 of 4: FA_2018_RD2060_241_10_20180925_00016.jpg



A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	1.04	Issue No.		15				
LM End	1.08	Issue Type +	Ма	Location *		WS		
Supplemental				GPS Latitude/Longitude				
Calegory	Category					End		
Item	2017 Stor	m Damage		38.25105	8°	38.250872°		
пеш				-121.71405	50°	-121.714792°		
DWR ID	DWR_RD2							
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 3/4 of the way down the water side slope concentrated at the waterline.

Site ID No:362

Site Designation:LMA-189 Repair Type: Erosion Rating:Area of Concern Field Date:7/12/2017

Notes: Erosion due to lack of revetment. Erosion ends at riprap

downstream. Vertical cut at summer wse.

LM Start	1.04	Rating **	М	Issue No.	15 (cont)
LM End	1.08	Issue Type +	Ma	Location *	WS

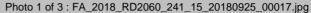




Photo 2 of 3: FA_2018_RD2060_241_15_20180925_00018.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	1.04	Issue No.	ue No. 15 (cont)					
LM End	1.08	Issue Type +	Ма	Location *	WS			
Category	Suppleme	ental	GPS Latitude/Longitude					
Calegory	Category					End		
Item	2017 Stor	m Damage		38.25105	8°	38.250872°		
пеш				-121.71405	o°	-121.714792°		
DWR ID	DWR_RD2060_01_f _ 2017_15							
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 3/4 of the way down the water side slope concentrated at the waterline.

Site ID No:362

Site Designation:LMA-189 Repair Type: Erosion Rating:Area of Concern Field Date:7/12/2017

Notes: Erosion due to lack of revetment. Erosion ends at riprap

downstream. Vertical cut at summer wse.



LM Start	1.09	Rating **	М	Issue No.		16		
LM End	1.10	Issue Type +	Ma	Location *	WS			
Category				GPS Latitude/Longitude				
Calegory		Start		End				
Item	2017 Storm Damage			38.25084	44 °	38.250833°		
item			-121.71494	44 °	-121.714994°			
DWR ID	DWR_RD2	060_01_f _ 201	7_16					
Comment Code								
1								

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope extending to the toe.

Site ID No:363

Site Designation:LMA-190 Repair Type: Erosion Rating:Area of Concern Field Date:7/12/2017

Notes: Small erosion up to high water line. Cuts into slope with 6'

vertical cut.



* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	1.09	Issue No.		16 (cont)					
LM End	1.10	Issue Type +	Ма	Location *	WS				
Catagony	Category Supplemental				Supplemental GPS Latitude/Long				le/Longitude
Calegory						End			
Item	2017 Stor	m Damage		38.25084	14 °	38.250833°			
пеш				-121.71494	14 °	-121.714994°			
DWR ID	DWR_RD2060_01_f _ 2017_16								
Comment Code									

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope extending to the toe.

Site ID No:363

Site Designation:LMA-190 Repair Type: Erosion Rating: Area of Concern

Field Date:7/12/2017

Notes: Small erosion up to high water line. Cuts into slope with 6' vertical cut.

LM Start	1.09	Rating **	М	Issue No.	16 (cont)
LM End	1.10	Issue Type +	Ma	Location *	WS

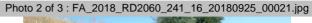




Photo 3 of 3: FA_2018_RD2060_241_16_20180925_00022.jpg



A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

	1						_
LM Start	1.22	Rating **	С	Issue No.	17		
LM End	1.23	Issue Type +		Location *	WS		
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	2017 Stor	m Damage		38.2511	86°	38.251289	0
пеш				-121.7171	14°	-121.717264	۰
DWR ID	DWR_RD2	060_01_f _ 201	7_17				
Comment Code							

No Photos

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 1/4 of the way down the water side slope extending to the toe.

Site ID No:364

Site Designation:LMA-191 Repair Type: Erosion Rating:Critical Field Date:7/12/2017

Notes: Very deep erosion that extends halfway into slope. Intact riprap on both sdes of erosion. Rated serious but could be critical if erosion cuts deep into price.

cuts deep into prism.

2018 Notes: Site repaired (Djulian).

LM Start	1.39	Rating **	A/W	Issue No.	20		
LM End	1.56	Issue Type +	Ma	Location *	WS		
Category	Suppleme	GPS Latitude/Longitude					
Calegory				Start		End	
Item	2017 Storm Damage			38.2518	86°	38.252619°	
пеш				-121.7199	33 °	-121.722842 °	
DWR ID	DWR_RD2060_01_f _ 2017_20						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope extending to the toe.

Site ID No:365

Site Designation:LMA-192 Repair Type: Erosion Rating:Serious Field Date:7/12/2017

Notes: Several deep narrow cuts into levee, but mostly minor erosion at

highwater line.



M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	1.39	1.39 Rating ** A/W			sue No. 20 (c		
LM End	1.56	Issue Type +	Ма	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Storm Damage			38.2518	36°	38.252619°	
пеш				-121.7199	33 °	-121.722842 °	
DWR ID	DWR_RD2060_01_f _ 2017_20						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope extending to the toe.

Site ID No:365

Site Designation:LMA-192

Repair Type: Erosion Rating:Serious

Field Date:7/12/2017

Notes: Several deep narrow cuts into levee, but mostly minor erosion at highwater line.

LM Start	1.39	Rating **	A/W	Issue No.	20 (cont)
LM End	1.56	Issue Type +	Ma	Location *	WS



Photo 3 of 3: FA_2018_RD2060_241_20_20180925_00028.jpg



A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	1.43	Rating **	М	Issue No.	6		
LM End	1.57	Issue Type +	Ма	Location *	WS		
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start		End	
Item		2017 USACE Erosion Survey, DRAFT			0 °	38.252605	۰
пеш	DRAFT				20°	-121.722924	0
DWR ID	DWR_RD2060_01_f _ 2018_6						
Comment Code							

No Photos

Inspector Comment

2017 Site ID: LDS 1.7 L Status: Eroding New

2017 Field Notes: Soil is boulders and sand. Multiple slumping sections.

Site History:

LM Start	1.45	Rating **	A/W	Issue No.		11	
LM End	1.45	Issue Type +	Ма	Location *	WS		
Catagory	Category Earthen Levee				GPS Latitude/Longitude		
Category		Start		End			
Itom	Slope Sta	bility		38.25201	3°	38.252013	0
Item				-121.72094	5 °	-121.720945	0
DWR ID	DWR_RD2	060_01_s _ 201	7_11				

No Photos

Comment Code S1: Repair slope instability.

Inspector Comment

Waterside slope slump from 2017 has not moved since discovered. Initial cause was clay materials, cattle and wet weather. Continue to monitor.

LM Start	1.46	Rating **	A/W	Issue No.	13			
LM End	1.48	Issue Type +	Ma	Location *		WS		
Category	Earthen L	GPS Latitude/Longitude						
				Start		End		
Itom	Slope Stability			38.2520	38°	38.252070	٥	
Item				-121.7212	12°	-121.721440	0	
DWR ID	DWR_RD2	060_01_s _ 201	7_13					
Comment Code								

No Photos

S1: Repair slope instability.

Inspector Comment

Waterside slope slump from 2017 has not moved since discovered. Initial cause was clay materials, cattle and wet weather. Continue to monitor.

* Location LS: Land Side WS: Water Side

N/A: Not Applicable

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	1.49	Rating **	A/W	Issue No.	14		
LM End	1.49	Issue Type +	Ма	Location *	WS		
Catagony	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Itom	Slope Stability			38.2521	30°	38.252130	0
Item				-121.7216	37°	-121.721637	0
DWR ID	DWR_RD2060_01_s _ 2017_14						

Comment Code

S1: Repair slope instability.

Inspector Comment

Waterside slope slump from 2017 has not moved since discovered. Initial cause was clay materials, cattle and wet weather. Continue to monitor.

No Photos

LM Start	1.81	Rating **	A/W	Issue No.		21	
LM End	1.84	Issue Type +	Ма	Location *		WS	
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Category				Start		End	
Item	2017 Stor	m Damage		38.25597	'2 °	38.256247	٥
item				-121.72419	7°	-121.724464	٥
DWR ID	DWR_RD2	060_01_f _ 201	7_21				

Inspector Comment

Comment Code

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope extending to the toe. Some slipping into the toe has occurred due to deep erosion.

Site ID No:366

Site Designation:LMA-193

Repair Type: Erosion

Rating:Serious

Field Date:7/12/2017

Notes: Erosion extends halfway into the slope.

Photo 1 of 3: FA_2018_RD2060_241_21_20180925_00029.jpg



LS : Land Side N/A : Not Applicable WS : Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	1.81	Rating **	A/W	Issue No.		21 (cont)	
LM End	1.84	Issue Type +	Ma	Location *		WS	
Catagony	Category			GPS Latitude/Longitude			
Calegory				Start		End	
Itom	2017 Stor	2017 Storm Damage			72 °	38.256247°	
пеш	Item			-121.7241	97°	-121.724464°	
DWR ID	DWR_RD2	7_21					
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope extending to the toe. Some slipping into the toe has occurred due to deep erosion.

Site ID No:366

Site Designation:LMA-193

Repair Type: Erosion Rating:Serious

Field Date:7/12/2017

Notes: Erosion extends halfway into the slope.

LM Start	1.81	Rating **	A/W	Issue No.	21 (cont)
LM End	1.84	Issue Type +	Ma	Location *	WS

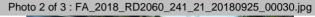




Photo 3 of 3: FA_2018_RD2060_241_21_20180925_00031.jpg



CR : Crown

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	1.90	Rating **	М	Issue No.	22	
LM End	1.95	Issue Type +	Ma	Location *		WS
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	2017 Storm Damage			38.2572	08°	38.257842°
пеш				-121.7246	19°	-121.724694°
DWR ID	DWR_RD2060_01_f _ 2017_22					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope extending to the toe. Some slipping into the toe has occurred. Site ID No:367

Site Designation:LMA-194 Repair Type: Erosion Rating: Area of Concern Field Date:7/12/2017

Notes: Minor crackingobserved below the hinge point and minor erosion at levee toe.

LM Start	1.90	Rating **	М	Issue No.	22 (cont)
LM End	1.95	Issue Type +	Ma	Location *	WS





Photo 2 of 3: FA_2018_RD2060_241_22_20180925_00033.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	1.90	Rating **	М	Issue No.		22 (cont)	
LM End	1.95	Issue Type +	Ма	Location *	ocation * WS		
Catagony	Category			GPS Latitude/Longitude			
Calegory				Start		End	
Itom	2017 Stor	2017 Storm Damage			08°	38.257842 °	
пеш	Item			-121.7246	19°	-121.724694°	
DWR ID	DWR_RD2	7_22					
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope extending to the toe. Some slipping into the toe has occurred. Site ID No:367

Site Designation:LMA-194 Repair Type: Erosion Rating: Area of Concern Field Date:7/12/2017

Notes: Minor crackingobserved below the hinge point and minor erosion

at levee toe.



LM Start	2.10	Rating **	A/W	Issue No. 23		
LM End	2.13	Issue Type +	Ma	Location *		
Category	Supplemental			GPS La	le/Longitude	
Category			Start		End	
Item	2017 Storm Damage			38.2593	17°	38.259258°
item			-121.7263	14°	-121.726939 °	
DWR ID	DWR_RD2					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope extending to the rip rap.

Site ID No:368

Site Designation:LMA-195 Repair Type: Erosion Rating:Serious Field Date:7/13/2017

Notes: Erosion appears to be prevously repaired, but has failed again.

Photo 1 of 3: FA_2018_RD2060_241_23_20180925_00035.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	2.10	Rating **	A/W	Issue No. 23 (co		23 (cont)	
LM End	2.13	Issue Type +	Ma	Location *			
Catagony	Category			GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	2017 Storm Damage			17°	38.259258	0
пеш				-121.7263	14°	-121.726939	0
DWR ID	DWR_RD2060_01_f _ 2017_23						
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope extending to the rip rap.

Site ID No:368

Site Designation:LMA-195 Repair Type: Erosion Rating:Serious Field Date:7/13/2017

Notes: Erosion appears to be prevously repaired, but has failed again.

LM Start	2.10	Rating **	A/W	Issue No.	23 (cont)
LM End	2.13	Issue Type +	Ma	Location *	

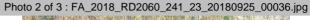




Photo 3 of 3: FA_2018_RD2060_241_23_20180925_00037.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	2.57	Rating **	М	Issue No.		24
LM End	2.60	Issue Type +	Ma	Location *	WS	
Category				GPS Latitude/Longitude		
Calegory				Start End		
Item	2017 Stor	m Damage		38.2574	67°	38.257286°
пеш				-121.7341	53°	-121.734683 °
DWR ID DWR_RD2060_01_f _ 2017_24						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Erosion commences approximately halfway down the water side slope. Part of the levee has sloughed down toward the waterline where further erosion occurs.

Site ID No:369

Site Designation:LMA-196

Repair Type: Erosion Rating:Area of Concern Field Date:7/13/2017

Notes: Levee slope is concave due slumping. Erosion at waterline.

LM Start	2.57	Rating **	М	Issue No.	24 (cont)
LM End	2.60	Issue Type +	Ma	Location *	WS

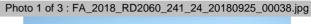




Photo 2 of 3: FA_2018_RD2060_241_24_20180925_00039.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	2.57	Rating **	М	Issue No.	No. 24 (cont)	
LM End	2.60	Issue Type +	Ma	Location *		WS
Category Supplemental				GPS Latitude/Longitude		
Calegory				Start	End	
Item	2017 Stor	m Damage		38.2574	67°	38.257286 °
item				-121.7341	53°	-121.734683 °
DWR ID DWR_RD2060_01_f _ 2017_24						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the water side slope. Part of the levee has sloughed down toward the waterline where further erosion occurs.

Site ID No:369

Site Designation:LMA-196

Repair Type: Erosion Rating:Area of Concern Field Date:7/13/2017

Notes: Levee slope is concave due slumping. Erosion at waterline.



LM Start	3.07	Rating **	A/W	Issue No.	25		
LM End	3.10	Issue Type +	Ma	Location *			
Category				GPS La	atitud	le/Longitude	
				Start		End	
Item	2017 Stor	m Damage		38.2607	72°	38.260569°	
item				-121.7408	17°	-121.741194°	
DWR ID	DWR ID DWR_RD2060_01_f _ 2017_25						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion occurs near the waterline. Part of the levee has sloughed down toward the waterline due to erosion.

Site ID No:370

Site Designation:LMA-197 Repair Type: Erosion

Rating:Serious Field Date:7/13/2017

Notes: Large erosion halfway into levee. Horizontal cracking on slope

almost 24"deep.



Location LS: Land Side

N/A: Not Applicable WS: Water Side

: Acceptable Minimally Acceptable

U : Unacceptable

N : Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	3.07	Rating **	A/W	Issue No.		25 (cont)		
LM End	3.10	Issue Type +	Ма	Location *				
Category	Catagori Supplemental				GPS Latitude/Longitude			
Calegory				Start	End			
Item	2017 Stor	m Damage		38.2607	72 °	38.260569°		
пеш				-121.7408	17°	-121.741194°		
DWR ID	DWR_RD2060_01_f _ 2017_25							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion occurs near the waterline. Part of the levee has sloughed down toward the waterline due to erosion.

Site ID No:370

Site Designation:LMA-197

Repair Type: Erosion Rating:Serious

Field Date:7/13/2017

Notes: Large erosion halfway into levee. Horizontal cracking on slope almost 24"deep.

LM Start	3.07	Rating **	A/W	Issue No.	25 (cont)
LM End	3.10	Issue Type +	Ma	Location *	

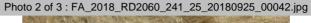




Photo 3 of 3: FA_2018_RD2060_241_25_20180925_00043.jpg



Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	3.17	Rating **	М	Issue No.		26
LM End	3.17	Issue Type +	Ma	Location *		
Supplemental Category				GPS Latitude/Longitude		
Calegory				Start	End	
Item	2017 Stor	m Damage		38.2599	25 °	38.259903°
пеш				-121.7422	-121.742281 °	
DWR ID	ID DWR_RD2060_01_f _ 2017_26					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion occurs near the waterline.

Site ID No:371

Site Designation:LMA-198 Repair Type: Erosion Rating:Area of Concern Field Date:7/13/2017

Notes: Minor erosion with sloughing. Horizontal cracks 3.5' deep.

LM Start	3.17	Rating **	М	Issue No.	26 (cont)
LM End	3.17	Issue Type +	Ma	Location *	



Photo 2 of 3: FA_2018_RD2060_241_26_20180925_00045.jpg



N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

Ob : Design & System En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	3.17	Rating **	М	Issue No.	26 (cont)		
LM End	3.17	Issue Type +	Ма	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory	Category					End	
Item	2017 Stor	m Damage		38.25992	25 °	38.259903°	
item				-121.7422	36°	-121.742281°	
DWR ID	ID DWR_RD2060_01_f _ 2017_26						
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion occurs near the waterline.

Site ID No:371

Site Designation:LMA-198 Repair Type: Erosion Rating:Area of Concern Field Date:7/13/2017

Notes: Minor erosion with sloughing. Horizontal cracks 3.5' deep.



LM Start	3.60	Rating **	М	Issue No.	27		
LM End	3.61	Issue Type +	Ма	Location *			
Category	Category				atituc	le/Longitude	
Category				Start		End	
Item	2017 Stor	m Damage		38.2614	69°	38.261464°	
item	item				89°	-121.748442°	
DWR ID	VR ID DWR_RD2060_01_f _ 2017_27						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences halfway down the slope and extends to the toe. Erosion is concentrated at the water line.

Site ID No:373

Site Designation:LMA-200

Repair Type: Erosion

Rating: Area of Concern

Field Date:7/13/2017

Notes: Small erosion with a narrow deep cut. Heavy veg is protecting

the slope.

Photo 1 of 3: FA_2018_RD2060_241_27_20180925_00047.jpg



N/A: Not Applicable LS: Land Side WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	3.60	Rating **	М	Issue No.	27 (cont)			
LM End	3.61	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Category				Start		End		
Item	2017 Stor	m Damage		38.2614	69°	38.261464°		
пеш				-121.7483	39°	-121.748442 °		
DWR ID	WR ID DWR_RD2060_01_f _ 2017_27							
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences halfway down the slope and extends to the toe. Erosion is concentrated at the water line.

Site ID No:373

Site Designation:LMA-200 Repair Type: Erosion Rating: Area of Concern Field Date:7/13/2017

Notes: Small erosion with a narrow deep cut. Heavy veg is protecting the slope.

Rating ** Issue No. 3.60 27 (cont) LM Start 3.61 Issue Type + Location ' Ма LM End



Photo 3 of 3: FA_2018_RD2060_241_27_20180925_00049.jpg



LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	3.65	Rating **	М	Issue No.	Issue No.	
LM End	3.65	Issue Type +	En	Location *		
Supplemental Supplemental				GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UCI	DWR UCIP Field Study			14°	38.261314°
пеш				-121.74919	91 °	-121.749191 °
DWR ID	22050					

Inspector Comment

Comment Code

FS_ID:41908 DS_ID:22050 EP_NO: 10119

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 09/19/2018 Updated record to reflect correct permit, historic levee log showed Permit No. 10119 correct Permit No. is 12784. Permit No. 10119 was issued for overhead lines. (O. Magana - DWR UCIP)

08/15/2013 Need to contact owner and verify status of crossing. (P. Amatya - DWR UCIP)

FIELD_STRUCT_DESC: 8.625-inch steel natural gas pipeline through the levee, at an unknown depth. Gas line marker on the landside (LS). Sign board on the waterside (WS). (8.625-inch pipeline installed across the channel and both levees of Lindsey Slough authorized under Permit No. 12784, 1979 - Pacific Gas and Electric Company [PG&E]; 8.625-inch line referenced incorrectly as part of Permit No. 10119, 1975 - PG&E, correct Permit No. is 12784). [Additional Reference(s): DWR

Levee Log, 2005]. FS Date: 8/15/2013

LM Start	3.65	Rating **	М	Issue No.	58 (cont)
LM End	3.65	Issue Type +	En	Location *	

Photo 1 of 2: UCIP_FA_2018_41908_30541.jpg



WS view: gasline sign board on levee slope.

Photo 2 of 2: UCIP_FA_2018_41908_30540.jpg



LS view: gasline indicator across the road from levee toe.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	3.67	Rating **	М	Issue No.	28	
LM End	3.67	Issue Type +	Ma	Location *		
Supplemental				GPS Latitude/Longitude		
Category				Start		End
Item	2017 Stor	m Damage		38.2611	81 °	38.261167°
пеш			-121.7495	42°	-121.749592°	
DWR ID DWR_RD2060_01_f _ 2017_28						
	Comment Code					

Inspector Comment

Levee Evaluation Comments

Description: Erosion is concentrated near the water line.

Site ID No:374

Site Designation:LMA-201 Repair Type: Erosion Rating:Area of Concern Field Date:7/13/2017

Notes: Small narrow and deep cut. May have been caused by a

collapsed beaver den.

LM Start	3.67	Rating **	М	Issue No.	28 (cont)
LM End	3.67	Issue Type +	Ma	Location *	

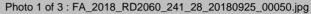




Photo 2 of 3: FA_2018_RD2060_241_28_20180925_00051.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	3.67	Rating **	М	Issue No.	28 (cont)		
LM End	3.67	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	2017 Storm Damage			38.2611	81 °	38.261167°	
пеш				-121.7495	42 °	-121.749592°	
DWR ID DWR_RD2060_01_f _ 2017_28							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion is concentrated near the water line.

Site ID No:374

Site Designation:LMA-201 Repair Type: Erosion Rating:Area of Concern Field Date:7/13/2017

Notes: Small narrow and deep cut. May have been caused by a

collapsed beaver den.



LM Start	3.76	Rating **	M	Issue No.		59		
LM End	3.76	Issue Type +	En	Location *				
Category Supplemental				GPS Latitude/Longitude				
				Start		End		
DWR UCIP Field Study			38.2612	11°	38.261211	0		
item				-121.7511	17°	-121.751117	0	
DWR ID 22045								
Comment Code								

Inspector Comment

FS_ID:41878 DS_ID:22045 EP_NO: 12784

Repair Type: Non-Urgent

Crossing Status: Indicator Found

UCIP Comments: 09/19/2018 Based on permit number 12784 review, 8.625-inch line should cross at RD2060U1 CLM 3.756 however, the markers for this crossing show the line crosses at RD2060U1 CLM 3.648 instead. Need to request line alignment for this crossing and update record. This could be a duplicate record of dsid 22050. (O. Magana - DWR UCIP)

08/15/2013 Need to contact owner to determine status and install signs if appropriate. (P. Amatya - DWR UCIP)

FIELD_STRUCT_DESC: 8.625-inch steel natural gas pipeline through the levee, 4 feet below the crown. Gas line marker off the landside (LS) toe. (To construct an 8.625-inch pipeline across the channel and both levees of Lindsey Slough authorized under Permit No. 12784, 1979 - Pacific Gas and Electric Company [PG&E]).

FS Date: 8/15/2013

Photo 1 of 3: UCIP_FA_2018_41878_30549.jpg



LS view: a gas plant and gasline indicator found on LS.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	3.76	Rating **	М	Issue No.		59 (cont)		
LM End	3.76	Issue Type +	En	Location *				
Catagony	Category Supplemental				GPS Latitude/Longitude			
Calegory						End		
Item	DWR UCIP Field Study				11 °	38.261211°		
пеш				-121.7511	17°	-121.751117°		
DWR ID	22045					·		

Comment Code Inspector Comment

FS_ID:41878 DS_ID:22045 EP_NO: 12784

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 09/19/2018 Based on permit number 12784 review, 8.625-inch line should cross at RD2060U1 CLM 3.756 however, the markers for this crossing show the line crosses at RD2060U1 CLM 3.648 instead. Need to request line alignment for this crossing and update record. This could be a duplicate record of dsid 22050. (O. Magana - DWR UCIP)

08/15/2013 Need to contact owner to determine status and install signs

if appropriate. (P. Amatya - DWR UCIP)
FIELD_STRUCT_DESC: 8.625-inch steel natural gas pipeline through the levee, 4 feet below the crown. Gas line marker off the landside (LS) toe. (To construct an 8.625-inch pipeline across the channel and both levees of Lindsey Slough authorized under Permit No. 12784, 1979 -Pacific Gas and Electric Company [PG&E]).

FS Date: 8/15/2013

LM Start	3.76	Rating **	М	Issue No.	59 (cont)
LM End	3.76	Issue Type +	En	Location *	



Photo 2 of 3: UCIP_FA_2018_41878_30548.jpg

LS view: closer view of gasline indicator found on LS.

Photo 3 of 3: UCIP_FA_2018_41878_30547.jpg



WS view: no indicators found on WS.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	4.28	Rating **	A/W	Issue No.	29		
LM End	4.28	Issue Type +	Ma	Location *			
Category			GPS Latitude/Longitude				
Category				Start		End	
Item	2017 Storm Damage			38.2609	92 °	38.261017	0
пеш	item				06°	-121.759847	0
DWR ID DWR_RD2060_01_f _ 2017_29							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences halfway down the slope and extends to the toe. Erosion is concentrated at the water line.

Site ID No:376

Site Designation:LMA-203 Repair Type: Erosion Rating:Area of Concern Field Date:7/13/2017

Notes: Could not get to erosion due to dense veg. Possibly a deep narrow cut.

narrow cut.

LM Start	4.28	Rating **	A/W	Issue No.	29 (cont)
LM End	4.28	Issue Type +	Ma	Location *	

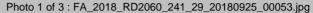




Photo 2 of 3: FA_2018_RD2060_241_29_20180925_00054.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	4.28	Rating **	A/W	Issue No. 29 (cont)		
LM End	4.28	Issue Type +	Ma	Location *		
Category	ental	GPS Latitude/Longitude				
Category				Start		End
Item	2017 Stor	m Damage		38.2609	92°	38.261017°
пеш				-121.7598	06°	-121.759847°
DWR ID	DWR ID DWR_RD2060_01_f _ 2017_29					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences halfway down the slope and extends to the toe. Erosion is concentrated at the water line.

Site ID No:376

Site Designation:LMA-203 Repair Type: Erosion Rating: Area of Concern Field Date:7/13/2017

Notes: Could not get to erosion due to dense veg. Possibly a deep

narrow cut.



LM Start	4.40	Rating **	М	Issue No.		30
LM End	4.46	Issue Type +	Ma	Location *		
Category	ental	GPS La	titud	le/Longitude		
Category				Start		End
Item	2017 Stor	m Damage		38.2608	50°	38.260425 °
item				-121.7618	75 °	-121.762861 °
DWR ID	DWR_RD2060_01_f _ 2017_30					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion/sloughing commences approximately halfway down the slope. Erosion is concentrated mostly near the water line and has resulting in slippage of the slope.

Site ID No:377

Site Designation:LMA-204 Repair Type: Erosion Rating: Area of Concern Field Date:7/13/2017

Notes: large cut is 100' of 320' site. Large cut is 12' vertical and the rest

is 6'.





N/A: Not Applicable WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	4.40	Rating **	М	Issue No. 3		30 (cont)
LM End	4.46	Issue Type +	Ма	Location *		
Category	GPS Latitude/Longitude					
Category				Start		End
Item	2017 Stor	m Damage		38.2608	50°	38.260425°
пеш			-121.7618	75 °	-121.762861 °	
DWR ID	DWR_RD2060_01_f _ 2017_30					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion/sloughing commences approximately halfway down the slope. Erosion is concentrated mostly near the water line and has resulting in slippage of the slope.

Site ID No:377

Site Designation:LMA-204

Repair Type: Erosion Rating:Area of Concern

Field Date:7/13/2017

Notes: large cut is 100' of 320' site. Large cut is 12' vertical and the rest

LM Start	4.40	Rating **	М	Issue No.	30 (cont)
LM End	4.46	Issue Type +	Ma	Location *	

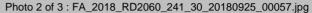




Photo 3 of 3: FA_2018_RD2060_241_30_20180925_00058.jpg



A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	4.46	Rating **	М	Issue No. 60		60
LM End	4.46	Issue Type +	En	Location *		
Category	GPS Latitude/Longitude					
Calegory	Calegory					End
Item	DWR UCIP Field Study				14°	38.260414°
пеш				-121.7629	43 °	-121.762943°
DWR ID	22051					

No Photos

Inspector Comment

Comment Code

FS_ID:41988 DS_ID:22051 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Dense vegetation on both levee slopes.
FIELD_STRUCT_DESC: *ABANDONED* 24-inch pipe of an unknown material or purpose through the levee, 17 feet below the crown. Inoperable closed slide gate on the waterside (WS) end. (Hastings Farms. Not on encroachment list). [Additional Reference(s): DWR

Levee Log, 2005]. FS Date: 8/15/2013

LM Start	4.50	Rating **	A/W	Issue No.		31	
LM End	4.53	Issue Type +	Ma	Location *			
Category	ental	GPS La	titud	e/Longitude			
Category				Start		End	
Item	2017 Stor	m Damage		38.2601	50°	38.259939°	
item				-121.7635	56°	-121.764064°	
DWR ID	DWR_RD2						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 3/4 of the way down the slope. It has resulted in some sloughing.

Site ID No:378

Site Designation:LMA-205 Repair Type: Erosion Rating:Serious Field Date:7/17/2017

Notes: Deep, wide, vertical cut into slope almost 1/2 way into sope.





LS: Land Side WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	4.50	Rating **	A/W	Issue No. 31 (co		31 (cont)
LM End	4.53	Issue Type +	Ma	Location *		
Category	ental	GPS La	atitud	le/Longitude		
Category				Start		End
Item	2017 Stor	m Damage		38.2601	50°	38.259939°
item				-121.7635	56°	-121.764064°
DWR ID	DWR ID DWR_RD2060_01_f _ 2017_31					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 3/4 of the way down the slope. It has resulted in some sloughing.

Site ID No:378

Site Designation:LMA-205 Repair Type: Erosion Rating:Serious Field Date:7/17/2017

Notes: Deep, wide, vertical cut into slope almost 1/2 way into sope.

LM Start	4.50	Rating **	A/W	Issue No.	31 (cont)
LM End	4.53	Issue Type +	Ma	Location *	. (,



Photo 3 of 3: FA_2018_RD2060_241_31_20180925_00061.jpg



A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	4.80	Rating **	A/W	Issue No.	32			
LM End	4.88	Issue Type +	Ma	Location *				
Category				GPS La	atitud	e/Longitude		
Calegory			Start		End			
Item	2017 Stor	m Damage		38.2607	14°	38.261808°		
пеш				-121.7679	72 °	-121.768536°		
DWR ID DWR_RD2060_01_f _ 2017_32								
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion/sloughing commences approximately halfway down the slope. Erosion is concentrated mostly near the water line and has resulting in slippage of the slope towards the toe.

Site ID No:379

Site Designation:LMA-206 Repair Type: Erosion

Rating:Serious

Field Date:7/17/2017

Notes: Several erosions with slumping. Fresh soil indicates active erosion this season. Adjacent slope has riprap. Riprap should be extended along this stretch.

LM Start	4.80	Rating **	A/W	Issue No.	32 (cont)
LM End	4.88	Issue Type +	Ma	Location *	

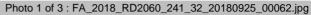




Photo 2 of 3: FA_2018_RD2060_241_32_20180925_00063.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	4.80	Rating **	A/W	Issue No.	32 (cont)				
LM End	4.88	Issue Type +	Ма	Location *					
Category	ental	GPS Latitude/Longitude							
Calegory			Start		End				
Item	2017 Stor	m Damage		38.2607	14°	38.261808 °			
пеш				-121.7679	72°	-121.768536 °			
DWR ID DWR_RD2060_01_f _ 2017_32									
	Comment Code								

Inspector Comment

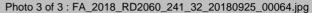
Levee Evaluation Comments

Description: Erosion/sloughing commences approximately halfway down the slope. Erosion is concentrated mostly near the water line and has resulting in slippage of the slope towards the toe.
Site ID No:379

Site Designation:LMA-206 Repair Type: Erosion

Rating:Serious Field Date:7/17/2017

Notes: Several erosions with slumping. Fresh soil indicates active erosion this season. Adjacent slope has riprap. Riprap should be extended along this stretch.





	LM Start	4.92	Rating **	М	Issue No.		33	
	LM End	4.92	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude				
	Category				Start		End	
	Item	2017 Stor	m Damage		38.2621	28°	38.262128°	
	item				-121.7691	75°	-121.769175 °	
	DWR ID	DWR_RD2	060_01_f _ 201	7_33				
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Erosion/sloughing commences approximately halfway down the slope. Erosion is concentrated mostly near the water line and has resulting in slippage of the slope into the toe. Site ID No:380

Site Designation:LMA-207 Repair Type: Erosion Rating: Area of Concern Field Date:7/17/2017

Notes: Reduced length of site from 275 to 62. No widespread erosion,

just 2 small erosions upstream from adjacent riprap.



* Location		** Rating		+ Issue Type
LS : Land Side N/A	: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR · Crown		II · I Inaccentable	A.W · Accentable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	4.92	Rating **	М	Issue No.	33 (cont)				
LM End	4.92	Issue Type +	Ма	Location *					
Category				GPS Latitude/Longitude					
Calegory			Start		End				
Item	2017 Stor	m Damage		38.26212	28 °	38.262128°			
пеш				-121.7691	75 °	-121.769175°			
DWR ID DWR_RD2060_01_f _ 2017_33									
	Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Erosion/sloughing commences approximately halfway down the slope. Erosion is concentrated mostly near the water line and has resulting in slippage of the slope into the toe.

Site ID No:380

Site Designation:LMA-207

Repair Type: Erosion Rating:Area of Concern

Field Date:7/17/2017 Notes: Reduced length of site from 275 to 62. No widespread erosion,

just 2 small erosions upstream from adjacent riprap.

LM Start	4.92	Rating **	М	Issue No.	33 (cont)
LM End	4.92	Issue Type +	Ma	Location *	

Photo 2 of 3: FA_2018_RD2060_241_33_20180925_00066.jpg



Photo 3 of 3: FA_2018_RD2060_241_33_20180925_00067.jpg



A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	5.00	Rating **	М	Issue No.	34			
LM End	5.01	Issue Type +	Ma	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory	Category					End		
Item	2017 Stor	m Damage		38.26263	36°	38.262658°		
пеш				-121.77050)3 °	-121.770547°		
DWR ID DWR_RD2060_01_f _ 2017_34								
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion is concentrated mostly near the water line and has resulting in slippage of the slope into the toe.

Site ID No:381

Site Designation:LMA-208 Repair Type: Erosion Rating:Area of Concern Field Date:7/17/2017

Notes: Extended site from 15' to 75' to include LMA-209. Small erosions will become 1 site next high water due to sloughing between them.

LM Start	5.00	Rating **	М	Issue No.	34 (cont)
LM End	5.01	Issue Type +	Ma	Location *	

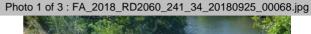




Photo 2 of 3: FA_2018_RD2060_241_34_20180925_00069.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	5.00	Rating **	М	Issue No.		34 (cont)	
LM End	5.01	Issue Type +	Ma	Location *			
Supplemental			GPS Latitude/Longitude				
Category				Start		End	
Item	2017 Storm Damage			38.262636°		38.262658°	
пеш				-121.770503°		-121.770547°	
DWR ID	DWR ID DWR_RD2060_01_f _ 2017_34						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion is concentrated mostly near the water line and has resulting in slippage of the slope into the toe.

Site ID No:381

Site Designation:LMA-208 Repair Type: Erosion Rating: Area of Concern Field Date:7/17/2017

Notes: Extended site from 15' to 75' to include LMA-209. Small erosions will become 1 site next high water due to sloughing between them.

Photo 3 of 3: FA_2018_RD2060_241_34_20180925_00070.jpg	
The second second second second	
多少的人就可以被发发性 。这	
Alegas Juri Progra	

LM Start	5.21	Rating **	A/W	Issue No.		18	
LM End	6.90	Issue Type +	Ma	Location *		CR	
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetation			38.261717°		38.274012°	
item			-121.772152 °		-121.795407°		
DWR ID DWR_RD2060_01_s _ 2017_18							
Comment Code							
10 : Koon the group ready by free of vegetation							

V9: Keep the crown roadway free of vegetation.

Inspector Comment

No Photos

C : Corrected A/W : Acceptable but Monitor & Maintain **FINAL DATA**

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	5.67	Rating **	М	Issue No.		19	
LM End	5.67	Issue Type +	Ma	Location *		CR	
Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
ltom	Item Repair Gates			38.2632	.57°	38.263257 °	
пеш				-121.779758°		-121.779758°	
DWR ID	DWR_RD2	060_01_s _ 201	7_19				
	Comment Code						
Inchactor Commont							

Repair or replace the cross gate.

Issue No. Rating ** 6.63 Μ 37 LM Start 6.70 Issue Type + Location * WS LM End Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 38.270878° 38.271845° Item -121.793168 ° -121.793498° DWR_RD2060_01_f _ 2018_37 DWR ID Comment Code

V1: Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

No Photos

LM Start	6.72	Rating **	M	Issue No.		38		
LM End	6.81	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
				Start		End		
Item	Vegetation			38.2719	93°	38.272957°		
item				-121.79369	97°	-121.794982°		
DWR ID DWR_RD2060_01_f _ 2018_38								
Comment Code								

V1: Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Lindsey Slough	Left	6.97	10/25/2018 10/25/2018	David Julian

LM Start	6.88	Rating **	M	Issue No.		39	
LM End	6.88	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetatio	n		38.2737	87°	38.273787 °	
пеш			-121.795492°		-121.795492°		
DWR ID	DWR_RD2	060_01_f _ 201	8_39				
		Comn	nent Cod	de			
V1 : Contro	ol annual g	grass and wee	ds on th	e levee slo	oes a	and	
easements	3.						
		Inspecto	or Comm	nent			

No Photos

* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected C: Corrected AW: Acceptable but Monitor & Maintain C: En: Enforcement

** Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiency Ob: Design & System Obsolescence C: En: Enforcement

Unit Cover Sheet

Fall 2018 Levee Inspection Results

Reclamation District No. 2060 Hastings

Waterway		Unit Miles
Unit No. 02 Ulatis Creek	Right	3.64

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	3/28/2018 - 3/28/2018		10/25/2018 - 10/25/2018	
DWR Inspector	Keith Millard		David Julian	
Accompanied By	Mark Boyd RD 2060 Hastings Tract		Mark Boyd RD 2060 Hastings Tract	
	Michael Moncrief MBK Engineers		Michael Moncrief MBK Engineers	
	Jack Kuechler RD 2060		Jack Kuechler RD 2060	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Ulatis Creek	Right	3.64	10/25/2018 10/25/2018	David Julian

LM Start	0.00	Rating **	М	Issue No.		8	
LM End	0.00	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Category			Start		End		
Item	DWR UCI	P Field Study		38.2894	74°	38.289474°	
пеш				-121.7759 ⁻	14°	-121.775914°	
DWR ID 22059							
	Comment Code						

Inspector Comment

FS_ID:46769 DS_ID:22059 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: - Abandoned pump structure in stream needs proper

abandonment- Not accessible due to wired fence

FIELD_STRUCT_DESC: *ABANDONED* Pump structure in stream. Concrete distribution box on the landside (LS) slope. Not accessible due to a wire fence. [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 8/15/2013





WS view: abandoned pump support in stream/channel. Not accessible due to vegetation.

Photo 2 of 2: UCIP_FA_2018_46769_31087.jpg



LS view: abandoned concrete distribution box. Not accessible due to wire fence.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Ulatis Creek	Right	3.64	10/25/2018 10/25/2018	David Julian

LM Start	0.12	Rating **	М	Issue No.		2	
LM End	1.78	Issue Type +	En	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Encroachi	ments		38.2763	51°	38.285819°	
пеш				-121.795922°		° -121.776942°	
DWR ID DWR_RD2060_02_s _ 2017_2							
		Comn	nent Cod	de			
FE : Fence	e						
		Inspecto	or Comm	nent			
This fence	has no pe	rmit.					

Photo 1 of 1 : FA_2018_RD2060_242_2_20180925_00001.jpg

Barbed wire fence on waterside has no permit.

LM Start	0.12	Rating **	С	Issue No.		5				
LM End	0.12	Issue Type +	Ma	Location *	LS					
Category	Earthen L	arthen Levee			Earthen Levee GPS Latitude/Longitude				le/Longitude	
Calegory				Start		End				
Item	Vegetatio	n		38.27639	9°	38.276399	0			
пеш				-121.79592	7°	-121.795927	0			
DWR ID	DWR_RD2	060_02_f _ 201	7_5							
	Commont Codo									

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

LM Start	0.83	Rating **	М	Issue No.		7	
LM End	1.14	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS L	atitud	le/Longitude	
Calegory				Start		End	
Item	Vegetatio	n	38.2851	45°	38.285110	0	
Item				-121.7937	'28 °	-121.787957	0
DWR ID	DWR_RD2	060_02_f _ 201	8_7				
		Comn	nent Cod	de			
V1 : Contre easements	•	grass and wee	ds on th	e levee slo	pes	and	
		Inspecto	or Comm	nent			

Maintain vegetation on water side slope



View of vegetation on water side slope (October 2018)

*Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

**Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiency

M : Minimally Acceptable CR : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Ulatis Creek	Right	3.64	10/25/2018 10/25/2018	David Julian

LM Start	0.83	Rating **	М	Issue No.		6	
LM End	1.73	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetatio	n		38.2851	45°	38.285143°	
item				-121.7937	28°	-121.777128°	
DWR ID	DWR_RD2	060_02_f _ 201	8_6				
		Comn	nent Cod	de			
V1 : Contro	ol annual g	grass and wee	ds on th	e levee slop	oes	and	
easements	easements.						
	Inspector Comment						

Photo 1 of 1: FA_2018_RD2060_242_6_20181025_00012.jpg

View of vegetation on land side slope (October 2018)

LM Start	1.74	Rating **	М	Issue No.		9	
LM End	1.74	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.2852	19°	38.285219°	
пеш				-121.7770	85°	-121.777085°	
DWR ID	22056					·	

Comment Code

Inspector Comment

FS_ID:18386 DS_ID:22056 EP_NO: 10148

Repair Type: Non-Urgent Crossing Status: Found

Maintain vegetation on land side slope

UCIP Comments: U-type conrete headwall on LS. Not accessible due to fence. Vegetation is partially blocking inlet & outlet pipe.

FIELD_STRUCT_DESC: 24-inch corrugated metal gravity drainage pipe through the levee, 16 feet below the crown. Flap gate on the waterside (WS) end. Concrete U-shaped headwall on the landside (LS) end. Not accessible due to a fence. Vegetation is partially blocking the inlet and the outlet of the pipe. (24-inch drainage pipe through the levee and a flap gate retained under Automatic Board Order (ABO) issued as Permit No. 10148, 1974 - Reclamation District No. 2060, care of G. T. Wyatt). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 8/15/2013

Photo 1 of 3: UCIP_FA_2018_18386_30873.jpg



WS view: overview of CMP from levee.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Ulatis Creek	Right	3.64	10/25/2018 10/25/2018	David Julian

LM Start	1.74	Rating **	M	Issue No.		9 (cont)
LM End	1.74	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		38.2852	19°	38.285219°
пеш				-121.7770	35 °	-121.777085 °
DWR ID	22056					·

Comment Code

Inspector Comment

FS_ID:18386 DS_ID:22056 EP_NO: 10148

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: U-type conrete headwall on LS. Not accessible due to fence. Vegetation is partially blocking inlet & outlet pipe.

FIELD_STRUCT_DESC: 24-inch corrugated metal gravity drainage pipe through the levee, 16 feet below the crown. Flap gate on the waterside (WS) end. Concrete U-shaped headwall on the landside (LS) end. Not accessible due to a fence. Vegetation is partially blocking the inlet and the outlet of the pipe. (24-inch drainage pipe through the levee and a flap gate retained under Automatic Board Order (ABO) issued as Permit No. 10148, 1974 - Reclamation District No. 2060, care of G. T. Wyatt). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 8/15/2013

LM Start	1.74	Rating **	М	Issue No.	9 (cont)
I M End	1.74	Issue Type +	En	Location *	



WS view: CM pipe with flap gate. Not accessible. Vegetation is partially blocking outlet pipe.

Photo 3 of 3: UCIP_FA_2018_18386_30874.jpg



LS view: CM pipe with U shaped concrete headwall. Not accessible. Vegetation is partially blocking inlet pipe.

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Ulatis Creek	Right	3.64	10/25/2018 10/25/2018	David Julian

LM Start	2.15	Rating **	М	Issue No.		10
LM End	2.15	Issue Type +	En	Location *		
Supplemental				GPS Latitude/Longitude		
Calegory	tegory					End
Item	DWR UCIP Field Study			38.29044	10°	38.290440 °
пеш				-121.77480	08°	-121.774808°
DWR ID	22060					

Inspector Comment

Comment Code

FS_ID:41668 DS_ID:22060 EP_NO: 5927

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: verify pipe has been abandoned properly. - abandoned pump and pipe.- electrical box on WS shoulder. FIELD_STRUCT_DESC: *ABANDONED* 18-inch steel irrigation discharge pipe through the levee, 4 feet below the crown. Corrugated metal cutoff wall. Pump on a piling structure on the riverbank. Siphon breaker on the landside (LS) slope. Concrete distribution box and irrigation ditch at the LS toe. (To relocate an existing irrigation pumping plant and discharge pipe through the levee authorized under Permit No. 5927, 1967 - Cache Slough Pheasant Hunting Preserve, Inc., care of Downey, Brand, Seymour, and Rohwer, Attorneys at Law). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 8/15/2013

LM Start	2.15	Rating **	M	Issue No.	10 (cont)
LM End	2.15	Issue Type +	En	Location *	



WS view: electrical box on pole and pump structure in background.

Photo 2 of 3: UCIP_FA_2018_41668_31160.jpg



WS view: pump on pile structure with stairs on bank.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Ulatis Creek	Right	3.64	10/25/2018 10/25/2018	David Julian

LM Start	2.15	Rating **	М	Issue No.		10 (cont)	
LM End	2.15	Issue Type +	En	Location *			
Category	GPS Latitude/Longitude						
Calegory	Category					End	
Item	DWR UCI	P Field Study		38.29044	0°	38.290440	0
пеш				-121.77480	8 °	-121.774808	0
DWR ID	22060						

Inspector Comment

Comment Code

FS_ID:41668 DS_ID:22060 EP_NO: 5927

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: verify pipe has been abandoned properly. abandoned pump and pipe.- electrical box on WS shoulder. FIELD_STRUCT_DESC: *ABANDONED* 18-inch steel irrigation discharge pipe through the levee, 4 feet below the crown. Corrugated metal cutoff wall. Pump on a piling structure on the riverbank. Siphon breaker on the landside (LS) slope. Concrete distribution box and irrigation ditch at the LS toe. (To relocate an existing irrigation pumping plant and discharge pipe through the levee authorized under Permit No. 5927, 1967 - Cache Slough Pheasant Hunting Preserve, Inc., care of Downey, Brand, Seymour, and Rohwer, Attorneys at Law). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 8/15/2013

Photo 3 of 3: UCIP_FA_2018_41668_31163.jpg



LS view: obstructed siphon breaker in steel riser on levee slope.

Unit Cover Sheet

Fall 2018 Levee Inspection Results

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles
Unit No. 03 Cache Slough	Right	5.03

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M	
Date of Inspection	3/28/2018 - 3/28/2018		10/25/2018 - 10/25/2018	
DWR Inspector	Keith Millard		David Julian	
Accompanied By	Mark Boyd RD 2060 Hastings Tract		Mark Boyd RD 2060 Hastings Tract	
	Michael Moncrief MBK Engineers		Michael Moncrief MBK Engineers	
	Jack Kuechler RD 2060		Jack Kuechler RD 2060	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	0.07	Rating **	М	Issue No.		16		
LM End	0.07	Issue Type +	Ма	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Slope Sta	bility		38.2963	50°	38.296302 °		
пеш	-121.747642 °				-121.747565 °			
DWR ID	DWR ID DWR_RD2060_03_s _ 2017_16							
		Comn	nent Cod	de				
S1 : Repai	r slope ins	tability.						
		Inspecto	or Comm	nent				
Sloughing on LS slope.								

Photo 1 of 2 : FA_2018	3_RD2060_24	3_16_2018092	5_00007.jpg
			THE REAL PROPERTY.
		THE PROPERTY.	1
		1-21-5	
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Looking down from the shoulder at the sloughing in the slope towards the irrigation ditch at toe.

LM Start	0.07	Rating **	М	Issue No.	16 (cont)
LM End	0.07	Issue Type +	Ма	Location *	LS

Photo 2 of 2: FA_2018_RD2060_243_16_20180925_00008.jpg



Standing on the slope looking upstream at the slough.

LM Start	0.10	Rating **	A/W	Issue No.		71	
LM End	0.10	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Category				Start		End	
Item	Slope Sta	bility		38.2960	84°	38.296084°	
item	-121				52°	-121.747052°	
DWR ID DWR_RD2060_03_s _ 2018_71							
		Comn	nent Cod	de			
S1 : Repai	r slope ins	tability.					
			_				
		Inspecto	or Comm	nent			
Minor slump at toe likely due to cattle should be repaired.							



Lower landside slope has slumped into ditch. Should be repaired.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	0.12	Rating **	М	Issue No.		13
LM End	0.18	Issue Type +	Ma	Location *		
Supplemental Supplemental			GPS Latitude/Longitude			
Category			Start		End	
ltom	2017 Stor	m Damage		38.2959	19°	38.295611°
пеш	Item			-121.7467	00°	-121.745742°
DWR ID DWR_RD2060_03_f _ 2017_13						·
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Sloughing and seepage occurs near the land side toe.

Site ID No:385

Site Designation:LMA-212 Repair Type: Stability Rating:Area of Concern Field Date:7/20/2017

Notes: Moderate sloughing halfway down LS slope. Monitor for

progression.

LM Start	0.12	Rating **	М	Issue No.	13 (cont)
LM End	0.18	Issue Type +	Ma	Location *	

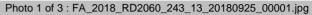




Photo 2 of 3: FA_2018_RD2060_243_13_20180925_00002.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	0.12	Rating **	М	Issue No.		13 (cont)
LM End	0.18	Issue Type +	Ma	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Itom	2017 Stor	m Damage		38.2959	19°	38.295611 °
пеш	Item			-121.7467	00°	-121.745742°
DWR ID DWR_RD2060_03_f _ 2017_13						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:Sloughing and seepage occurs near the land side toe.

Site ID No:385

Site Designation:LMA-212 Repair Type: Stability Rating:Area of Concern Field Date:7/20/2017

Notes: Moderate sloughing halfway down LS slope. Monitor for

progression.



LM Start	0.15	Rating **	A/W	Issue No.		19	
LM End	0.19	Issue Type +	Ма	Location *		LS	
Category Earthen Levee				GPS La	titud	e/Longitude	
				Start		End	
Item	Slope Sta	bility		38.2957	38°	38.295559°	
пеш			-121.7462	93 °	-121.745583°		
DWR ID DWR_RD2060_03_s _ 2017_19							
0 .0.1							

Comment Code

S1: Repair slope instability.

Inspector Comment

There are several signs of sloughing occuring on the slope notices after the flood event Feb. 2017 storm. 10/11/17: This issue's rating has been changed from U to A/W in consideration of the DWR 2017 Levee Evaluation Storm Site entry.

Photo 1 of 2 : FA_2018_RD2060_243_19_20180925_00014.jpg



Standind at levee mile 0.15 looking downstream from the landside slope.

* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated
N: Not Inspected/Rated
C: Corrected
M: Minimally Acceptable
C: Corrected
AW: Acceptable but Monitor & Maintain

** Rating
A: Issue Type
Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	0.15	Rating **	A/W	Issue No.	o. 19 (cont)		
LM End	0.19	Issue Type +	Ma	Location *	LS		
Earthen Levee			GPS Latitude/Longitude				
Category			Start		End		
Item	Slope Sta	bility		38.2957	38°	38.295559	•
пеш				-121.7462	93 °	-121.745583	0
DWR ID DWR_RD2060_03_s _ 2017_19							
Comment Code							

S1: Repair slope instability.

Inspector Comment

There are several signs of sloughing occuring on the slope notices after the flood event Feb. 2017 storm. 10/11/17: This issue's rating has been changed from U to A/W in consideration of the DWR 2017 Levee Evaluation Storm Site entry.

Photo 2 of 2 : FA_2018_RD2060_243_19_20180925_00015.jpg



Just upstream of the erosion site looking downstream from the landside slope.

LM Start	0.64	Rating **	М	Issue No.	14			
LM End	0.64	Issue Type +	Ma	Location *				
Category			GPS Latitude/Longitude					
Calegory	Category			Start		End		
Item	2017 Stor	m Damage		38.29219	97°	38.292208°		
item			-121.73966	61 °	-121.739611 °			
DWR ID	R ID DWR_RD2060_03_f _ 2017_14							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences near the edge of the crown and extends down the slope. Erosion has resulted in slippage into the waterside toe.

Site ID No:386

Site Designation:LMA-213 Repair Type: Erosion Rating:Area of Concern Field Date:7/20/2017

Notes:

Photo 1 of 3: FA_2018_RD2060_243_14_20180925_00004.jpg



LS : Land Side N/A : Not Applicable WS : Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated

C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	0.64	Rating **	М	Issue No.	14 (cont)	
LM End	0.64	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category			Start		End
ltom	2017 Stor	m Damage		38.29219	7°	38.292208°
пеш	Item			-121.73966	i1°	-121.739611 °
DWR ID	DWR ID DWR_RD2060_03_f _ 2017_14					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences near the edge of the crown and extends down the slope. Erosion has resulted in slippage into the waterside toe.

Site ID No:386

Site Designation:LMA-213 Repair Type: Erosion

Rating:Area of Concern Field Date:7/20/2017

Notes:



Photo 2 of 3: FA_2018_RD2060_243_14_20180925_00005.jpg



Photo 3 of 3: FA_2018_RD2060_243_14_20180925_00006.jpg



CR : Crown

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	0.81	Rating **	М	Issue No.		15	
LM End	0.81	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory				Start		End	
ltom	2017 Stor	m Damage		38.29163	3°	38.291606°	
Item				-121.73675	o°	-121.736714°	
DWR ID	DWR_RD2060_03_f _ 2017_15						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 3/4 of the way down the slope. Erosion has resulted in slippage into the waterside toe.

Site ID No:388

Site Designation:LMA-215 Repair Type: Erosion Rating:Area of Concern Field Date:7/20/2017

Notes: Narrow erosion on WS slope. Monitor for progression.

LM Start	0.90	Rating **	М	Issue No.	72			
LM End	0.90	Issue Type +	En	Location *				
Category	Suppleme	ental		GPS La	titud	le/Longitude		
Calegory			Start		End			
Item	DWR UCI		38.2906	84°	38.290684°			
item			-121.7356	68°	-121.735668 °			
DWR ID	22067							
Comment Code								

Inspector Comment

FS_ID:18727 DS_ID:22067 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Seem abandoned.Not found- pump on LS. Needs more exploration.

FIELD_STRUCT_DESC: 6-inch steel irrigation discharge pipe through the levee, 2.8 feet below the crown. Pump on the landside (LS). Gate valve on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 107, April 1959, (HLM 0.4), 10-inch pipe referenced].

FS Date: 8/15/2013

No Photos

Photo 1 of 2: UCIP_FA_2018_18727_31317.jpg



Waterside view: levee slope.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	0.90	Rating **	М	Issue No.		72 (cont)
LM End	0.90	Issue Type +	En	Location *		
Category			GPS Latitude/Longi			
Calegory			Start		End	
Item	DWR UCI	P Field Study		38.29068	84 °	38.290684°
пеш			-121.73566	8°	-121.735668 °	
DWR ID	22067					

Inspector Comment

Comment Code

FS_ID:18727 DS_ID:22067 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Seem abandoned.Not found- pump on LS. Needs

more exploration.

FIELD_STRUCT_DESC: 6-inch steel irrigation discharge pipe through the levee, 2.8 feet below the crown. Pump on the landside (LS). Gate valve on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 107, April 1959, (HLM 0.4), 10-inch pipe

referenced]. FS Date: 8/15/2013



Waterside view: levee slope and a steel pipe.

LM Start	0.90	Rating **	М	Issue No.		73	
LM End	0.90	Issue Type +	En	Location *			
Category				GPS Lat	ituc	le/Longitude	
Category				Start		End	
Item	DWR UCI	P Field Study		38.29068	4 °	38.290684°	
пеш				-121.73563	9°	-121.735639°	
DWR ID	22063						
Comment Code							

Inspector Comment

FS_ID:18726 DS_ID:22063 EP_NO: 6342

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Leaky siphon breaker may need to be repaired.

Dense vegetation on WS.Not found- gate valve on LS.

FIELD_STRUCT_DESC: 16-inch coated steel drainage discharge pipe through the levee, 8 feet below the crown. Vertical pump in drainage ditch on the landside (LS). Gate valve on the LS. Siphon breaker on the waterside (WS). (Plans to replace a 10-inch drainage pipe through the levee authorized under Permit No. 6342, 1968 - Hastings Farms. Plans to revise plans by changing pipe size from 10-inch to 16-inch through the levee authorized under Permit No. 6342-A, 1971 - Hastings Farms). FS Date: 8/15/2013

Photo 1 of 3: UCIP_FA_2018_18726_31314.jpg

Landside view: pump, service pole, steel support structure, walkway, and pipe.

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence En : Enforcement

WS: Water Side

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	0.90	Rating **	М	Issue No.		73 (cont)	
LM End	0.90	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCI	P Field Study		38.2906	84 °	38.290684°	
пеш				-121.73563	39°	-121.735639°	
DWR ID	22063					·	

Inspector Comment

Comment Code

FS_ID:18726 DS_ID:22063 EP_NO: 6342

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Leaky siphon breaker may need to be repaired.

Dense vegetation on WS.Not found- gate valve on LS.

FIELD_STRUCT_DESC: 16-inch coated steel drainage discharge pipe through the levee, 8 feet below the crown. Vertical pump in drainage ditch on the landside (LS). Gate valve on the LS. Siphon breaker on the waterside (WS). (Plans to replace a 10-inch drainage pipe through the levee authorized under Permit No. 6342, 1968 - Hastings Farms. Plans to revise plans by changing pipe size from 10-inch to 16-inch through the levee authorized under Permit No. 6342-A, 1971 - Hastings Farms). FS Date: 8/15/2013

LM Start	0.90	Rating **	М	Issue No.	73 (cont)
LM End	0.90	Issue Type +	En	Location *	



Landside view: pipe and pump on steel structure in drain ditch.

Photo 3 of 3: UCIP_FA_2018_18726_31315.jpg



Waterside view: only leaky siphon breaker found.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	1.12	Rating **	С	Issue No.		17		
LM End	1.13	Issue Type +	Ма	Location *				
Category	Suppleme	ental		GPS Lat	ituc	le/Longitude		
Calegory				Start		End		
2017 Storm Damage				38.29053	9°	38.290544	0	
Item				-121.73160	3°	-121.731494	0	
DWR ID	DWR_RD2	060_03_f _ 201	7_17					
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences near the crown and has resulted in slippage into the waterside toe.

Site ID No:389

Site Designation:LMA-216

Repair Type: Erosion

Rating:Critical Field Date:7/20/2017

Notes: Vertical section sloughing halfway down WS slope. Continued erosion down WS slope. Recommend repair before next high water.

2018 Notes: Site has been repaired (Djulian)

Photo 1 of 2: FA_2018_RD2060_243_18_20180925_00012.jpg	
下了一条,从1995年,1995年的1995年,1995年的1995年的1995年,1995年的1995	

No Photos



Looking downstream at the erosion in the waterside slope and toe.

LM Start	1.12	Rating **	A/W	Issue No.		18	
LM End	1.12	Issue Type +	Ma	Location *		WS	
Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Slope Sta	bility		38.2905	58°	38.290558°	
item	item					-121.731580°	
DWR ID DWR_RD2060_03_s _ 2017_18							

Comment Code

S1: Repair slope instability.

Inspector Comment

The District has scheduled repairs of this site. 10/11/17: This issue's rating has been changed from U to A/W in consideration of the DWR 2017 Levee Evaluation Storm Site entry.

* Location

N/A: Not Applicable LS: Land Side WS: Water Side

A: Acceptable

U : Unacceptable

Minimally Acceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

FINAL DATA

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	1.12	Rating **	A/W	A/W Issue No. 18 (cont)			
LM End	1.12	Issue Type +	Ma	Location *	WS		
Category	GPS Latitude/Longitude						
Calegory	Category					End	
Item	Slope Sta	bility		38.2905	58°	38.290558°	
пеш				-121.7315	80°	-121.731580°	
DWR ID DWR_RD2060_03_s _ 2017_18							
Comment Code							

S1: Repair slope instability.

Inspector Comment

The District has scheduled repairs of this site. 10/11/17: This issue's rating has been changed from U to A/W in consideration of the DWR 2017 Levee Evaluation Storm Site entry.

Photo 2 of 2: FA_2018_RD2060_243_18_20180925_00013.jpg



Looking upstream at the erosion on the waterside slope.

LM Start	1.21	Rating **	М	Issue No.	20		
LM End	1.23	Issue Type +	Ma	Location *			
Category	Suppleme	ental	GPS La	tituc	le/Longitude		
Category				Start		End	
Item	2017 Storm Damage			38.2905	11 °	38.290486°	
item				-121.72986	67°	-121.729603°	
DWR ID DWR_RD2060_03_f _ 2017_20							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences 1/4 of the way down the slope with slippage towards the water side toe.

Site ID No:390

Site Designation:LMA-217 Repair Type: Erosion Rating: Area of Concern Field Date:7/20/2017

Notes: Erosion halfway down WS slope. Monitor for progression.





N/A: Not Applicable LS: Land Side WS: Water Side

: Acceptable : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	1.21	Rating **	М	Issue No.	20 (cont)	
LM End	1.23	Issue Type +	Ma	Location *		
Category	ental	GPS Latitude/Longitude				
Category				Start		End
Item	2017 Stor	m Damage		38.2905	11 °	38.290486°
пеш				-121.7298	67°	-121.729603°
DWR ID DWR_RD2060_03_f _ 2017_20						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences 1/4 of the way down the slope with slippage towards the water side toe.

Site ID No:390

Site Designation:LMA-217 Repair Type: Erosion Rating: Area of Concern Field Date:7/20/2017

Notes: Erosion halfway down WS slope. Monitor for progression.

LM Start	1.21	Rating **	М	Issue No.	20 (cont)
LM End	1.23	Issue Type +	Ma	Location *	

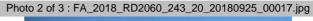




Photo 3 of 3: FA_2018_RD2060_243_20_20180925_00018.jpg



A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	1.38	Rating **	М	Issue No.	21	
LM End	1.42	Issue Type +	Ma	Location *		
Category	ental	GPS Latitude/Longitude				
					End	
Item	2017 Stor	m Damage		38.2900	67°	38.289608°
пеш				-121.7268	39°	-121.726344°
DWR ID DWR_RD2060_03_f _ 2017_21						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:MBK Delta Erosion Sites_6-29-2017

Site ID No:482

Site Designation:LMA-320 Repair Type: Erosion Rating:Area of Concern Field Date:8/29/2017

Notes:

LM Start	1.38	Rating **	М	Issue No.	21 (cont)
LM End	1.42	Issue Type +	Ма	Location *	





Photo 2 of 3: FA_2018_RD2060_243_21_20180925_00020.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	1.38	Rating **	М	Issue No.	21 (cont)		
LM End	1.42	Issue Type +	Ma	Location *			
Category Supplemental GPS Latitude/Long						le/Longitude	
Category				Start		End	
Item	2017 Stor	m Damage		38.29006	7°	38.289608°	
пеш				-121.72683	9°	-121.726344°	
DWR ID DWR_RD2060_03_f _ 2017_21							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:MBK Delta Erosion Sites_6-29-2017

Site ID No:482

Site Designation:LMA-320 Repair Type: Erosion Rating:Area of Concern Field Date:8/29/2017

Notes:



LM Start	1.45	Rating **	М	Issue No.		22	
LM End	1.59	Issue Type +	Ма	Location *			
Category	Suppleme	GPS Latitude/Longitude					
Calegory				Start		End	
Item	2017 Stor	m Damage		38.28925	66°	38.287689	0
пеш		-121.72605	60°	-121.724658	0		
DWR ID	DWR_RD2	060_03_f _ 201	7_22				
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:Erosion commences halfway down the slope and results in slippage into the waterside toe.

Site ID No:392

Site Designation:LMA-219

Repair Type: Erosion Rating:Area of Concern

Field Date:7/20/2017

Notes: Moderate erosion present on WS slope. Monitor for progression.

Photo 1 of 3: FA_2018_RD2060_243_22_20180925_00022.jpg



LS : Land Side N/A : Not Applicable WS : Water Side

* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated

C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

intain En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	1.45	Rating **	М	Issue No. 22 (cont)		22 (cont)
LM End	1.59	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Calegory			Start		End	
Item	2017 Stor	2017 Storm Damage			56°	38.287689°
пеш			-121.7260	50°	-121.724658°	
DWR ID	DWR_RD2060_03_f _ 2017_22					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences halfway down the slope and results in slippage into the waterside toe.

Site ID No:392

Site Designation:LMA-219 Repair Type: Erosion Rating:Area of Concern Field Date:7/20/2017

Notes: Moderate erosion present on WS slope. Monitor for progression.

LM Start	1.45	Rating **	М	Issue No.	22 (cont)
LM End	1.59	Issue Type +	Ma	Location *	

Photo 2 of 3 : FA_2018_RD2060_243_22_20180925_00023.jpg



Photo 3 of 3: FA_2018_RD2060_243_22_20180925_00024.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	1.52	Rating **	A/W	Issue No.	7		_
LM End	1.74	Issue Type +	Ma	Location *	WS		
Category			GPS Latitude/Longitude				
Category				Start		End	
Item		CE Erosion S	Survey,	38.28859	98°	38.286051	0
пеш	DRAFT			-121.72518	34 °	-121.722818	0
DWR ID	DWR_RD2060_03_f _ 2018_7						
Comment Code							

Inspector Comment

2017 Site ID: CHS 23.6 R

Status: Eroding

2017 Field Notes: No observed changes.

Site History: Site added in 1997 and removed in 2003. 2005 - Put back in the inventory. 2006 - Stone repair at the middle of the site. 2011 -Some rock place at toe in the past year. 2013 - Site extended both upstream and downstream to include new erosion pockets.



USACE 2013 Photo #1

LM Start	1.62	Rating **	A/W	Issue No.	23	
LM End	1.63	Issue Type +	Ma	Location *		
Category Supplemental			GPS Latitude/Longitude			
				Start		End
Item	2017 Stor	2017 Storm Damage			36°	38.287222°
item			-121.7243	64 °	-121.724253°	
DWR ID	DWR_RD2060_03_f _ 2017_23					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences halfway down the slope and results in slippage into the waterside toe. Existing rip rap has sloughed into the water side toe.

Site ID No:393

Site Designation:LMA-220

Repair Type: Erosion

Rating:Serious

Field Date:7/20/2017

Notes: Moderate sloughing 8ft from WS crown. Erosion at high water

mark.

Photo 1 of 3: FA_2018_RD2060_243_23_20180925_00025.jpg



N/A: Not Applicable LS: Land Side WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	1.62	Rating **	A/W	Issue No.		23 (cont)
LM End	1.63	Issue Type +	Ma	Location *		
Category Supplemental			GPS Latitude/Longitude			
			Start		End	
Item	2017 Stor	2017 Storm Damage			36°	38.287222°
пеш				-121.72436	64°	-121.724253 °
DWR ID	DWR_RD2	7_23				
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences halfway down the slope and results in slippage into the waterside toe. Existing rip rap has sloughed into the water side toe.

Site ID No:393

Site Designation:LMA-220

Repair Type: Erosion

Rating:Serious Field Date:7/20/2017

Notes: Moderate sloughing 8ft from WS crown. Erosion at high water

mark.

11101	1.62	Rating **	A/W	Issue No.	22 (cont)
LM Start	1.02	Rating	A/VV	issue ivo.	23 (cont)
LM End	1.63	Issue Type +	Ma	Location *	

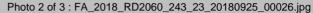




Photo 3 of 3: FA_2018_RD2060_243_23_20180925_00027.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	1.65	Rating **	М	Issue No.		24	
LM End	1.73	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	2017 Storm Damage			38.2869	53 °	38.285939	٥
пеш				-121.7239	58°	-121.723061	٥
DWR ID	DWR_RD2	060_03_f _ 201	7_24				
		Comn	nent Cod	de			

No Photos

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences halfway down the slope. Existing rip rap has sloughed into the water side toe.

Site ID No:394

Site Designation:LMA-221 Repair Type: Erosion Rating: Area of Concern Field Date:7/20/2017

Notes: Site includes LMA-218. Erosion halfway down slope. Monitor for progression.

LM Start	1.84	Rating **	М	Issue No.	25	
LM End	1.92	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	2017 Storm Damage			38.2848	25°	38.284467°
				-121.7217	64 °	-121.720339°
DWR ID	DWR_RD2060_03_f _ 2017_25					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences halfway down the slope and results in slippage into the waterside toe.

Site ID No:395

Site Designation:LMA-222 Repair Type: Erosion Rating:Area of Concern Field Date:7/20/2017

Notes: Erosion halfway down slope. Monitor for progression.

Photo 1 of 3: FA_2018_RD2060_243_25_20180925_00028.jpg



N/A: Not Applicable LS: Land Side WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	1.84	Rating **	М	Issue No.		25 (cont)		
LM End	1.92	Issue Type +	Ма	Location *				
Supplemental				GPS Latitude/Longitude				
Category				Start		End		
ltom	2017 Storm Damage			38.284825 °		38.284467	0	
Item				-121.72176	4 °	-121.720339	0	
DWR ID DWR_RD2060_03_f _ 2017_25								
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences halfway down the slope and results in slippage into the waterside toe.

Site ID No:395

Site Designation:LMA-222 Repair Type: Erosion Rating: Area of Concern Field Date:7/20/2017

Notes: Erosion halfway down slope. Monitor for progression.

LM Start	1.84	Rating **	М	Issue No.	25 (cont)
LM End	1.92	Issue Type +	Ma	Location *	

Photo 2 of 3: FA_2018_RD2060_243_25_20180925_00029.jpg



Photo 3 of 3: FA_2018_RD2060_243_25_20180925_00030.jpg



N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.02	Rating **	A/W	Issue No.		5	
LM End	2.60	Issue Type +	Ma	Location *		WS	
Category				GPS Latitude/Longitude			
Category				Start		End	
Itom		CE Erosion S	Survey,	38.284120°		38.277633°	
пеш	Item DRAFT				77°	-121.711912°	
DWR ID DWR_RD2060_03_f _ 2018_5							
Comment Code							

Inspector Comment

2017 Site ID: CHS 22.9 R

Status: Eroding

2017 Field Notes: Sites 22.5, 22.6, 22.8, and 22.9 were combined into

one long erosion site due to due erosion.

Site History: 2007 - Geotechnical failure of midside slope and wave wash/scalloping in toe area. Stone revetment upstream and downstream of site. Similar sites are present all along the right bank downstream of this site, most could be repaired with some maintenance. 2008 - Small scour pockets and mid-slope wave wash.

2010 - Minor new erosion. 2011 - Site extended downstream and new erosion. 2013 - Pockets of erosion behind willows and extending into the levee toe. 2015 - Erosion pockets have increased in size. 2016 -Rock has been placed in some of the pockets.

No Photos



USACE 2013 Photo #1

LM Start	2.02	Rating **	M	Issue No.		6		
LM End	2.08	Issue Type +	Ma	Location *		WS		
Category				GPS Latitude/Longitude				
Category				Start		End		
Item	2017 USACE Erosion Survey,				05°	38.283302°		
пеш	DRAFT			-121.7184	71 °	-121.717814°		
DWR ID DWR_RD2060_03_f _ 2018_6								
Comment Code								

Inspector Comment 2017 Site ID: CHS 23.0 R

Status: Eroding

2017 Field Notes: No observed changes. Site History: 2010 - Small maintenance site.

* Location

N/A: Not Applicable LS: Land Side WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.02	Rating **	М	Issue No.		26		
LM End	2.06	Issue Type +	Ма	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
ltom	2017 Stor	m Damage		38.283914°		38.283422°		
ltem				-121.718614°		-121.718206°		
DWR ID DWR_RD2060_03_f _ 2017_26								
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences halfway down the slope and results in slippage into the waterside toe. Existing rip rap has sloughed into the water side toe.

Site ID No:396

Site Designation:LMA-223

Repair Type: Erosion Rating:Area of Concern

Field Date:7/18/2017 Notes: Erosion to high water line.

LM Start	2.02	Rating **	М	Issue No.	26 (cont)
LM End	2.06	Issue Type +	Ma	Location *	





Photo 2 of 3: FA_2018_RD2060_243_26_20180925_00032.jpg



N : Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.02	Rating **	М	Issue No.		26 (cont)	
LM End	2.06	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory						End	
Itom	2017 Stor	m Damage		38.2839	14°	38.283422°	
ltem				-121.7186	14°	-121.718206°	
DWR ID DWR_RD2060_03_f _ 2017_26							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences halfway down the slope and results in slippage into the waterside toe. Existing rip rap has sloughed into the water side toe.

Site ID No:396

Site Designation:LMA-223 Repair Type: Erosion Rating:Area of Concern Field Date:7/18/2017

Notes: Erosion to high water line.



LM Start	2.12	Rating **	A/W	Issue No.		27
LM End	2.15	Issue Type +	Ma	Location *		
Category				GPS La	atitud	le/Longitude
Category				Start		End
Item	2017 Stor	m Damage		38.2827	33°	38.282403 °
item				-121.7176	83 °	-121.717428 °
DWR ID						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 1/4 of the way down the slope and results in slippage into the waterside toe.

Site ID No:397

Site Designation:LMA-224 Repair Type: Erosion Rating:Serious Field Date:7/18/2017

Notes: Benched erosion with large cracks on slope above. Light veg in erosion.

Photo 1 of 3: FA_2018_RD2060_243_27_20180925_00034.jpg



N/A: Not Applicable LS: Land Side WS: Water Side

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.12	Rating **	A/W	Issue No.	o. 27 (cont)		
LM End	2.15	Issue Type +	Ma	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory		Start		End			
Item	2017 Stor	m Damage		38.2827	33 °	38.282403 °	
пеш				-121.7176	83 °	-121.717428°	
DWR ID	DWR_RD2	RD2060_03_f _ 2017_27					
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 1/4 of the way down the slope and results in slippage into the waterside toe.

Site ID No:397

Site Designation:LMA-224 Repair Type: Erosion Rating:Serious Field Date:7/18/2017

Notes: Benched erosion with large cracks on slope above. Light veg in erosion.

LM Start	2.12	Rating **	A/W	Issue No.	27 (cont)
LM End	2.15	Issue Type +	Ma	Location *	





Photo 3 of 3: FA_2018_RD2060_243_27_20180925_00036.jpg



N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.19	Rating **	A/W	Issue No.		28	
LM End	2.22	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory	Zategory					End	
Item	2017 Stor	m Damage		38.2818	39°	38.281486 °	
пеш				-121.7169	64°	-121.716661 °	
DWR ID DWR_RD2060_03_f _ 2017_28							
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 1/4 of the way down the slope and results in slippage into the waterside toe.

Site ID No:398

Site Designation:LMA-225 Repair Type: Erosion

Rating:Serious Field Date:7/18/2017

Notes: Erosion is near vertical with light veg. Existing rip rap to the left of site.

LM Start	2.19	Rating **	A/W	Issue No.	28 (cont)
LM End	2.22	Issue Type +	Ma	Location *	





Photo 2 of 3: FA_2018_RD2060_243_28_20180925_00038.jpg



Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.19	Rating **	A/W	Issue No.	ssue No. 28 (cont)		
LM End	2.22	Issue Type +	Ma	Location *			
Supplemental				GPS Latitude/Longitude			
Category	Zategory					End	
Item	2017 Stor	m Damage		38.28183	39°	38.281486 °	
пеш				-121.71696	64 °	-121.716661 °	
DWR ID	R ID DWR_RD2060_03_f _ 2017_28						
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 1/4 of the way down the slope and results in slippage into the waterside toe.

Site ID No:398

Site Designation:LMA-225 Repair Type: Erosion Rating:Serious Field Date:7/18/2017

Notes: Erosion is near vertical with light veg. Existing rip rap to the left

of site.



LM Start	2.30	Rating **	М	Issue No.		29		
LM End	2.33	Issue Type +	Ma	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory	gory					End		
Item	2017 Stor	m Damage		38.2806	67°	38.280467°		
item				-121.7156	64 °	-121.715242°		
DWR ID	060_03_f _ 201							
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in slippage into the waterside toe.

Site ID No:399

Site Designation:LMA-226 Repair Type: Erosion Rating:Area of Concern Field Date:7/18/2017

Notes: Vertical erosion at high water mark.

Photo 1 of 3: FA_2018_RD2060_243_29_20180925_00040.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.30	Rating **	М	Issue No. 29 (c		29 (cont)
LM End	2.33	Issue Type +	Ma	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory	alegory					End
Item	2017 Stor	m Damage		38.2806	67°	38.280467°
item				-121.7156	64°	-121.715242°
DWR ID DWR_RD2060_03_f _ 2017_29						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in slippage into the waterside toe.

Site ID No:399

Site Designation:LMA-226 Repair Type: Erosion Rating: Area of Concern Field Date:7/18/2017

Notes: Vertical erosion at high water mark.

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Photo 2 of 3: FA_2018_RD2060_243_29_20180925_00041.jpg

LM Start	2.30	Rating **	М	Issue No.	29 (cont)
LM End	2.33	Issue Type +	Ma	Location *	

Photo 3 of 3: FA_2018_RD2060_243_29_20180925_00042.jpg



LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.36	Rating **	М	Issue No.		31		
LM End	2.43	Issue Type +	Ma	Location *				
Supplemental			GPS Latitude/Longitude					
Category		Start		End				
Item	2017 Stor	2017 Storm Damage		38.2802	08°	38.279336°		
пеш				38.280208 ° 3	-121.714172°			
DWR ID DWR_RD2060_03_f _ 2017_31								
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in slippage into the waterside toe.

Site ID No:400

Site Designation:LMA-227 Repair Type: Erosion Rating:Area of Concern Field Date:7/18/2017

Notes: Steep cut but protected with heavy woody veg.

LM Start	2.36	Rating **	М	Issue No.	31 (cont)
LM End	2.43	Issue Type +	Ma	Location *	

Photo 1 of 3: FA_2018_RD2060_243_31_20180925_00043.jpg



Photo 2 of 3: FA_2018_RD2060_243_31_20180925_00044.jpg



CR : Crown

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.36	Rating **	М	Issue No.		31 (cont)		
LM End	2.43	Issue Type +	Ma	Location *				
Category			GPS Latitude/Longitude					
Category		Start		End				
Item	2017 Stor	m Damage		38.2802	08°	38.279336°		
пеш				38.280208 °		-121.714172°		
DWR ID DWR_RD2060_03_f _ 2017_31								
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in slippage into the waterside toe.

Site ID No:400

Site Designation:LMA-227 Repair Type: Erosion Rating:Area of Concern Field Date:7/18/2017

Notes: Steep cut but protected with heavy woody veg.



LM Start	2.47	Rating **	М	Issue No.		32		
LM End	2.49	Issue Type +	Ma	Location *				
Category			GPS Latitude/Longitude					
Calegory	Category		Start		End			
Item	2017 Stor	m Damage		38.2787	94°	38.278533°		
item				-121.7137	03°	-121.713453°		
DWR ID DWR_RD2060_03_f _ 2017_32								
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in sloughing into the waterside toe.

Site ID No:401

Site Designation:LMA-228 Repair Type: Erosion Rating:Area of Concern Field Date:7/18/2017

Notes: Erosion and sloughing. Heavy veg flanking both sides.

Photo 1 of 3: FA_2018_RD2060_243_32_20180925_00046.jpg



LS : Land Side N/A : Not Applicable WS : Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated

C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.47	Rating **	М	Issue No.		32 (cont)	
LM End	2.49	Issue Type +	Ma	Location *			
Category Supplemental			GPS Latitude/Longitude				
Calegory	Lategory		Start		End		
Item	2017 Stor	m Damage		38.2787	94°	38.278533°	
пеш				-121.7137	03°	-121.713453°	
DWR ID DWR_RD2060_03_f _ 2017_32							
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in sloughing into the waterside toe.

Site ID No:401

Site Designation:LMA-228 Repair Type: Erosion Rating: Area of Concern Field Date:7/18/2017

Notes: Erosion and sloughing. Heavy veg flanking both sides.

LM Start	2.47	Rating **	М	Issue No.	32 (cont)
LM End	2.49	Issue Type +	Ma	Location *	

Photo 2 of 3: FA_2018_RD2060_243_32_20180925_00047.jpg



Photo 3 of 3: FA_2018_RD2060_243_32_20180925_00048.jpg



LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.55	Rating **	М	Issue No.		33	
LM End	2.55	Issue Type +	Ма	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory	alegory					End	
Item	2017 Storm Damage			38.2779	56°	38.277928°	
пеш				-121.7128	14°	-121.712775°	
DWR ID	ID DWR_RD2060_03_f _ 2017_33						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and extends to the waterside toe.

Site ID No:402

Site Designation:LMA-229 Repair Type: Erosion Rating:Area of Concern Field Date:7/18/2017

Notes: Small but deep vertical cut down to water.

LM Start	2.55	Rating **	М	Issue No.	33 (cont)
LM End	2.55	Issue Type +	Ma	Location *	



Photo 2 of 3: FA_2018_RD2060_243_33_20180925_00050.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.55	Rating **	М	Issue No.	33 (cont)		
LM End	2.55	Issue Type +	Ma	Location *			
Category	Supplemental			GPS La	titud	e/Longitude	
Calegory						End	
ltom	2017 Stor	m Damage		38.2779	56°	38.277928°	
пеш	Item			-121.7128	14°	-121.712775°	
DWR ID	D DWR_RD2060_03_f _ 2017_33						
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and extends to the waterside toe.

Site ID No:402

Site Designation:LMA-229 Repair Type: Erosion Rating:Area of Concern Field Date:7/18/2017

Notes: Small but deep vertical cut down to water.



LM Start	2.56	Rating **	A/W	Issue No.	34		
LM End	2.58	Issue Type +	Ma	Location *			
Catagory	Category					le/Longitude	
Category				Start		End	
Item	2017 Stor	m Damage		38.2778	50°	38.277706°	
item				-121.7126	39°	-121.712414°	
DWR ID DWR_RD2060_03_f _ 2017_34							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 1/4 of the way down the slope and results in sloughing into the waterside toe.

Site ID No:403

Site Designation:LMA-230 Repair Type: Erosion

Rating:Serious Field Date:7/18/2017

Notes: Erosion causing sloughing. Horizontal cracks about 6' up from

erosion.



LS : Land Side N/A : Not Applicable WS : Water Side

A: A

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.56	Rating **	A/W	Issue No.	34 (cont)		
LM End	2.58	Issue Type +	Ма	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory	liegory					End	
Item	2017 Stor	m Damage		38.2778	50°	38.277706°	
пеш						-121.712414°	
DWR ID	ID DWR_RD2060_03_f _ 2017_34						
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 1/4 of the way down the slope and results in sloughing into the waterside toe.

Site ID No:403

Site Designation:LMA-230 Repair Type: Erosion Rating:Serious

Field Date:7/18/2017

Notes: Erosion causing sloughing. Horizontal cracks about 6' up from erosion.

LM Start	2.56	Rating **	A/W	Issue No.	34 (cont)
LM End	2.58	Issue Type +	Ma	Location *	



Photo 3 of 3: FA_2018_RD2060_243_34_20180925_00054.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.64	Rating **	М	Issue No.		35	
LM End	2.64	Issue Type +	Ma	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Category				Start		End	
ltom	2017 Stor	m Damage		38.2771	06 °	38.277078°	
пеш	Item				89°	-121.711447°	
DWR ID	WR ID DWR_RD2060_03_f _ 2017_35						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 1/4 of the way down the slope and results in sloughing into the waterside toe.

Site ID No:404

Site Designation:LMA-231 Repair Type: Erosion Rating:Area of Concern Field Date:7/18/2017

Notes: Small erosion and slouging adjacent to revetted slope.

LM Start	2.64	Rating **	М	Issue No.	35 (cont)
LM End	2.64	Issue Type +	Ma	Location *	

Photo 1 of 3: FA_2018_RD2060_243_35_20180925_00055.jpg



Photo 2 of 3: FA_2018_RD2060_243_35_20180925_00056.jpg



A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.64	Rating **	М	Issue No.	35 (cont)	
LM End	2.64	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category		Start		End	
Item	2017 Stor	m Damage		38.27710)6°	38.277078°
пеш				-121.71148	39°	-121.711447°
DWR ID DWR_RD2060_03_f _ 2017_35						
	Comment Code					

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately 1/4 of the way down the slope and results in sloughing into the waterside toe.

Site ID No:404

Site Designation:LMA-231 Repair Type: Erosion Rating: Area of Concern Field Date:7/18/2017

Notes: Small erosion and slouging adjacent to revetted slope.



LM Start	2.69	Rating **	A/W	Issue No.		36
LM End	2.73	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	2017 Stor	m Damage		38.2766	08°	38.276133°
itein					11 °	-121.710394°
DWR ID	DWR_RD2	060_03_f _ 201	7_36			

Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Sloughing commences approximately halfway down the slope and extends to the waterside toe.

Site ID No:405

Site Designation:LMA-232 Repair Type: Erosion Rating:Serious Field Date:7/18/2017

Notes: Vertical cut at highwater mark.

Photo 1 of 3: FA_2018_RD2060_243_36_20180925_00058.jpg



N/A: Not Applicable LS: Land Side WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	2.69	Rating **	A/W	Issue No.	36 (cont)			
LM End	2.73	Issue Type +	Ma	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	2017 Stor	m Damage		38.2766	08°	38.276133°		
пеш				-121.7108	11 °	-121.710394°		
DWR ID	DWR_RD2060_03_f _ 2017_36							
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description:Sloughing commences approximately halfway down the slope and extends to the waterside toe.

Site ID No:405

Site Designation:LMA-232 Repair Type: Erosion Rating:Serious Field Date:7/18/2017

Notes: Vertical cut at highwater mark.

LM Start	2.69	Rating **	A/W	Issue No.	36 (cont)
LM End	2.73	Issue Type +	Ma	Location *	

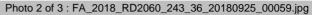




Photo 3 of 3: FA_2018_RD2060_243_36_20180925_00060.jpg



LS : Land Side N/A : Not Applicable WS : Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

nspected/Rated +

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En : Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	3.24	Rating **	М	Issue No.	37	
LM End	3.24	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	2017 Stor	m Damage		38.2702	31 °	38.270203°
пеш				-121.7058	97°	-121.705856°
DWR ID DWR_RD2060_03_f _ 2017_37						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in sloughing into the waterside toe. Existing rip rap has been pulled off the slope at this site.

Site ID No:406

Site Designation:LMA-233

Repair Type: Erosion Rating:Area of Concern

Field Date:7/18/2017

Notes: Erosion is next to a pumphouse and slope is protected withrip

rap.

LM Start	3.24	Rating **	М	Issue No.	37 (cont)
LM End	3.24	Issue Type +	Ма	Location *	

Photo 1 of 3: FA_2018_RD2060_243_37_20180925_00061.jpg



Photo 2 of 3: FA_2018_RD2060_243_37_20180925_00062.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	3.24	Rating **	М	Issue No. 37 (cont		37 (cont)
LM End	3.24	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Category			Start		End	
Item	2017 Stor	m Damage		38.2702	31 °	38.270203°
item				-121.7058	97°	-121.705856°
DWR ID DWR_RD2060_03_f _ 2017_37						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in sloughing into the waterside toe. Existing rip rap has been pulled off the slope at this site.

Site ID No:406

Site Designation:LMA-233

Repair Type: Erosion Rating:Area of Concern

Field Date:7/18/2017

Notes: Erosion is next to a pumphouse and slope is protected withrip

rap.

Photo 3 of 3: FA_2018_RD2060_243_37_20180925_00063.jpg

LM Start	3.24	Rating **	М	Issue No.	74		
LM End	3.24	Issue Type +	En	Location *			
Category			GPS Latitude/Longitude				
Calegory			Start		End		
Item	DWR UCI	P Field Study		38.27015	1°	38.270151°	
item				-121.70578	2°	-121.705782°	
DWR ID	22064						
	Comment Code						

Inspector Comment

FS_ID:18723 DS_ID:22064 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Only a CMP riser was found on WS.

FIELD STRUCT DESC: 36-inch asbestos bonded steel irrigation discharge pipe through the levee, 15 feet below the crown, not found. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope, found. Pump in pump house on a pile structure in the stream, not found. Service pole and anchor on the landside (LS) slope, not found. FS Date: 8/15/2013

Photo 1 of 3: UCIP_FA_2018_18723_31303.jpg



WS view: slide gate in CMP riser (bottom- marked) and may be abandoned pile for pump support (marked-right).

Location

LS: Land Side N/A: Not Applicable

WS: Water Side

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	3.24	Rating **	М	Issue No.		74 (cont)	
LM End	3.24	Issue Type +	En	Location *			
Category				GPS Lat	itud	le/Longitude	
Calegory	Jalegory			Start		End	
Item	DWR UCI	P Field Study		38.27015	1°	38.270151	0
пеш				-121.70578	2°	-121.705782	0
DWR ID	22064						

Inspector Comment

Comment Code

FS_ID:18723 DS_ID:22064 EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Only a CMP riser was found on WS.

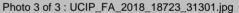
FIELD_STRUCT_DEŚC: 36-inch asbestos bonded steel irrigation discharge pipe through the levee, 15 feet below the crown, not found. Slide gate in a corrugated metal pipe (CMP) riser on the waterside (WS) slope, found. Pump in pump house on a pile structure in the stream, not found. Service pole and anchor on the landside (LS) slope, not found. FS Date: 8/15/2013

 LM Start
 3.24
 Rating **
 M
 Issue No.
 74 (cont)

 LM End
 3.24
 Issue Type +
 En
 Location *



WS view: closer view of slide gate in CMP riser.





WS view: slide gate and air vent inside CMP riser.

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	3.59	Rating **	М	Issue No.	38		
LM End	3.63	Issue Type +	Ма	Location *			
Category	Suppleme		GPS Latitude/Longitude				
Calegory				Start End			
Item	2017 Stor	m Damage		38.26640	8°	38.266047°	
пеш				-121.70165	o°	-121.701061 °	
DWR ID	DWR_RD2	2060_03_f _ 2017_38					
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:MBK Delta Erosion Sites_6-29-2017

Site ID No:484

Site Designation:LMA-322 Repair Type: Erosion Rating:Area of Concern Field Date:8/29/2017

Notes:

LM Start	3.59	Rating **	М	Issue No.	38 (cont)
LM End	3.63	Issue Type +	Ma	Location *	

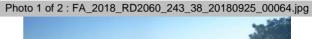




Photo 2 of 2: FA_2018_RD2060_243_38_20180925_00065.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	3.66	Rating **	М	Issue No.	39		
LM End	3.71	Issue Type +	Ma	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory				Start End			
Item	2017 Stor	m Damage		38.2657	42 °	38.265342°	
пеш				-121.7005	22 °	-121.699881 °	
DWR ID	DWR ID DWR_RD2060_03_f _ 2017_39						
	Comment Code						

Inspector Comment

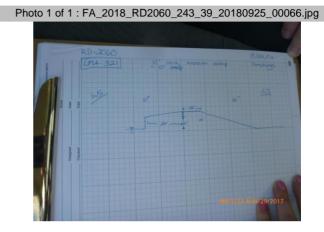
Levee Evaluation Comments

Description:MBK Delta Erosion Sites_6-29-2017

Site ID No:483

Site Designation:LMA-321 Repair Type: Erosion Rating:Area of Concern Field Date:8/29/2017

Notes:



LM Start	3.78	Rating **	A/W	Issue No.		4		
LM End	4.09	Issue Type +	Ма	Location *		WS		
Category Supplemental				GPS Latitude/Longitude				
				Start		End		
Item		CE Erosion S	Survey,	38.26458	5°	38.260593	0	
пеш	DRAFT			-121.69886	8°	-121.696403	0	
DWR ID	DWR_RD2	060_03_f _ 201	8_4					
Comment Code								

Inspector Comment

2017 Site ID: CHS 21.1 R

Status: Eroding

2017 Field Notes: Significant toe erosion within last year.

Site History: 2011 - Several pockets of erosion from rotational failure and slumping toe. 2013 - Site extended downstream to include new erosion pockets. 2016 - New rock in one of the erosion spots.

Photo 1 of 1: FA_2018_RD2060_243_4_20181105_00089.jpg



USACE 2013 Photo #1

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	3.82	Rating **	A/W	Issue No.		40	
LM End	3.94	Issue Type +	Ma	Location *			
Supplemental				GPS Latitude/Longitude			
Category				Start		End	
Item	2017 Stor	m Damage		38.2640	06°	38.262364°	
пеш				-121.6988	11 °	-121.698103°	
DWR ID	DWR ID DWR_RD2060_03_f _ 2017_40						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in sloughing into the waterside toe. Existing rip rap has been pulled off the slope at this site

Site ID No:410

Site Designation:LMA-237 Repair Type: Erosion

Rating:Serious

Field Date:7/18/2017

Notes: This site is combined with LMA-234. There is minor toe erosion along whole 631 lf, but there is a 20' wide deep erosion at 38.26347, -121.69859. That is the only location that is serious and is likely due toa collapsed beaver den.

LM Start	3.82	Rating **	A/W	Issue No.	40 (cont)
LM End	3.94	Issue Type +	Ma	Location *	

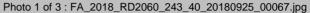




Photo 2 of 3: FA_2018_RD2060_243_40_20180925_00068.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	3.82	Rating **	A/W	Issue No.	40 (cont)		
LM End	3.94	Issue Type +	Ма	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory				Start	End		
Item	2017 Stor	m Damage		38.26400)6°	38.262364°	
пеш				-121.6988	l1°	-121.698103°	
DWR ID	DWR_RD2	DWR_RD2060_03_f _ 2017_40					
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in sloughing into the waterside toe. Existing rip rap has been pulled off the slope at this site

Site ID No:410

Site Designation:LMA-237

Repair Type: Erosion

Rating:Serious

Field Date:7/18/2017

Notes: This site is combined with LMA-234. There is minor toe erosion along whole 631 lf, but there is a 20' wide deep erosion at 38.26347, -121.69859. That is the only location that is serious and is likely due toa collapsed beaver den.



LM Start	3.96	Rating **	A/W	Issue No.	41		
LM End	4.00	Issue Type +	Ма	Location *			
Category			GPS Latitude/Longitude				
Calegory		Start				End	
Item	2017 Stor	m Damage		38.2621	14°	38.261583	0
itein				-121.69797	78°	-121.697647	0
DWR ID	D DWR_RD2060_03_f _ 2017_41						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in sloughing into the waterside toe.

Site ID No:411

Site Designation:LMA-238 Repair Type: Erosion Rating:Serious

Field Date:7/18/2017 Notes: This site includes LMA-235. Wide erosion looks like several

small sited merged. Heavy veg indicates slow erosion.



* Location LS : Land Side

Side N/A: Not Applicable

WS : Water Side N/A : Not Applicable

* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	3.96	Rating **	A/W	Issue No.		41 (cont)	
LM End	4.00	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	m Damage		38.2621	14°	38.261583°	
пеш				-121.6979	78°	-121.697647°	
DWR ID	DWR_RD2060_03_f _ 2017_41						
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in sloughing into the waterside toe.

Site ID No:411

Site Designation:LMA-238 Repair Type: Erosion Rating:Serious Field Date:7/18/2017

Notes: This site includes LMA-235. Wide erosion looks like several small sited merged. Heavy veg indicates slow erosion.

LM Start	3.96	Rating **	A/W	Issue No.	41 (cont)
LM End	4.00	Issue Type +	Ma	Location *	



Photo 3 of 3: FA_2018_RD2060_243_41_20180925_00072.jpg



LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	4.06	Rating **	A/W	Issue No.		42
LM End	4.08	Issue Type +	Ma	Location *		
Supplemental				GPS Latitude/Longitude		
Category			Start		End	
Item	2017 Stor	m Damage		38.2607	89°	38.260644°
пеш				-121.6969	64°	-121.696828°
DWR ID DWR_RD2060_03_f _ 2017_42						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in sloughing into the waterside toe. Existing rip rap has been pulled off the slope at this site.

Site ID No:412

Site Designation:LMA-239

Repair Type: Erosion

Rating:Serious

Field Date:7/17/2017

Notes: Small erosion. Appears that site grows slowly with each high water. The center of the eosion is a deep cut that extends below rhe waterline. Possible beaver den collapse.

LM Start	4.06	Rating **	A/W	Issue No.	42 (cont)
LM End	4.08	Issue Type +	Ma	Location *	

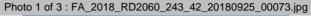




Photo 2 of 3: FA_2018_RD2060_243_42_20180925_00074.jpg



Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	4.06	Rating **	A/W	Issue No.	42 (cont)	
LM End	4.08	Issue Type +	Ma	Location *		
Supplemental				GPS Latitude/Longitude		
Category						End
Item	2017 Stor	m Damage		38.2607	89°	38.260644°
пеш				-121.6969	64°	-121.696828°
DWR ID DWR_RD2060_03_f _ 2017_42						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in sloughing into the waterside toe. Existing rip rap has been pulled off the slope at this site.

Site ID No:412

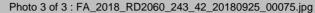
Site Designation:LMA-239

Repair Type: Erosion

Rating:Serious

Field Date:7/17/2017

Notes: Small erosion. Appears that site grows slowly with each high water. The center of the eosion is a deep cut that extends below rhe waterline. Possible beaver den collapse.





LM Start	4.06	Rating **	A/W	Issue No.	43	
LM End	4.08	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory	Zategory			Start		End
Item	2017 Stor	m Damage		38.26078	39°	38.260644°
item				-121.69696	64°	-121.696828°
DWR ID	ID DWR_RD2060_03_f _ 2017_43					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in sloughing into the waterside toe.

Site ID No:409

Site Designation:LMA-236 Repair Type: Erosion Rating:Area of Concern Field Date:7/18/2017

Notes: 3' cut to slope down to water, with a 50' deep cut. Heavy veg

suggests slow progression of erosion.

Photo 1 of 3: FA_2018_RD2060_243_43_20180925_00076.jpg



N/A: Not Applicable LS: Land Side

WS: Water Side

: Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2060 Hastings

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Cache Slough	Right	5.03	10/25/2018 10/25/2018	David Julian

LM Start	4.06	Rating **	A/W	Issue No.	ue No. 43 (cont)			
LM End	4.08	Issue Type +	Ma	Location *		Location *		
Supplemental				GPS Latitude/Longitude				
Calegory	egory			Start		End		
Item	2017 Stor	m Damage		38.26078	39°	38.260644°		
пеш				-121.69696	64 °	-121.696828°		
DWR ID	DWR_RD2060_03_f _ 2017_43							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: Erosion commences approximately halfway down the slope and results in sloughing into the waterside toe.

Site ID No:409

Site Designation:LMA-236 Repair Type: Erosion Rating:Area of Concern Field Date:7/18/2017

Notes: 3' cut to slope down to water, with a 50' deep cut. Heavy veg suggests slow progression of erosion.

LM Start	4.06	Rating **	A/W	Issue No.	43 (cont)
LM End	4.08	Issue Type +	Ma	Location *	



Photo 3 of 3: FA_2018_RD2060_243_43_20180925_00078.jpg



LS : Land Side N/A : Not Applicable WS : Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

C : Corrected Ob : Design & Sys A/W : Acceptable but Monitor & Maintain En : Enforcement